South African Photovoltaic Industry Association

SAPVIA- Distributed Generation WG Minutes

Date: 15 July 2025
Time: 11:00-13:00
Chairperson: Oliver Johnston

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:	Oliver Johnston (OJ)	***Attendees:*** Jigisha Mandalia (JM) Dermott Murphy (DM) Awie Bosman (AB) Jeandre van Zyl (JZ) Juandre Pitout (JP) Pieter Oosthuizen (PO) Monique Botha (MB) Fortune Nosi (FN) Carel Landman (CL) Alecia Pienaar (AP) Wosu Emeka Nwabugwu (WEN) Khalida Suleymanova (KS) Dr Rethabile Melamu (RM) Sinethemba Mnguni (SM) Zimkita Bilibana (ZB) Pamela Gama (PG)
Note taker:	Thabang Molai (TM)	

Minutes

1.	**Opening**	**Chairperson**
	Welcome and Introduction The chairperson welcomed everyone to the working group meeting and acknowledged attendees for making time to attend. **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.	**Workstreams**	
	2.1 Embedded Projects • Unfortunately, the first part of the meeting was not recorded, and we were unable to capture the minutes for that section. We apologize for any inconvenience this may cause.	**Claude P - Lead** Agreepa M Avesh P

	• Below are the minutes for the recorded portion of the meeting	Boitumelo M Hennie H Jeandre Z Mandisa M Martin K Tanya J Jacques B
	2.2 Wheeled Projects **2.2.1 Eskom Bi-lateral** • OJ: • Provided an update on the wheel project, noting no major developments on traditional Eskom-to-Eskom wheeling since the last meeting. • The key focus is on portfolio wheeling, which allows pooling of load from multiple accounts and allocation from a generator to that pool load. • This approach reduces the risk of per-site reconciliation and makes wheeling more user-friendly. • Eskom had indicated that portfolio wheeling would be released towards the end of the year, and the team will follow up on this during the next meeting with Eskom in August. **2.2.2 Virtual Wheeling** • OJ: • Provided an update on virtual wheeling discussions with Eskom. • A meeting with Eskom is tentatively scheduled for next week (or the week after) to clarify key questions. • The questions focus on buyer requirements (e.g., direct PPA with generator), account structure (single buyer vs. multiple buyers), maximum term length (currently understood to be 5 years), municipal good standing and its impact on rebates, refund timing and potential penalties for non-compliance, grid allocation rules for virtual wheeling, costs to amend agreements, buyer agreements with multiple suppliers, adding new accounts to a pool, and curtailments and system events. • A key output from that engagement will be a table summarizing questions raised and Eskom's responses, to be shared with the group. • JP: • Raised a question regarding virtual wheeling, specifically whether there are any active case studies or real-world examples of sites	**Oliver J - Lead** Avesh P Awie B Basetsana M Jacques B Jigisha M Mandisa M Levi T Jeandre Z Julian D Fortune N Dermott M Wessel W Mike B

	currently wheeling power virtually. He emphasized the need for actual utility bills or tariff impacts to support stakeholder engagement and improve understanding of virtual wheeling's practical implications. • Noted that customers often have a better grasp of the wheeling concept than service providers and are beginning to view it as a familiar commercial model. The lack of clarity around rebates, tariff application, and process flow is contributing to indecision, especially for smaller-scale systems (100 kW – 1 MW) contemplating wheeling versus behind-the-meter solutions. • OJ responded that to his knowledge, the only known virtual wheeling activity to date is Vodacom's pilot project, which was launched a few months ago. Other potential participants are still in the application phase with Eskom, and there is no known active site beyond Vodacom. • DM added that while he does not have direct case studies, he attended a presentation at the Africa Energy Forum (AEF) where Sasol and Discovery Green discussed their virtual wheeling initiatives. He suggested that these entities may be valuable sources of case studies and practical examples. **2.2.3 Municipal Wheeling Frameworks** • OJ: • The team has requested a meeting with Sustainable Energy Africa to understand their current work on the Municipal Wheeling Framework. • The meeting is expected to take place early next week, and updates will be shared with the group afterwards. **2.2.4 Tariff Structure & Reconciliation** • OJ initiated the discussion by recalling a previous conversation on potentially drafting an industry response to the RTP adjustment that was implemented earlier this year. • RM responded that there is no immediate action underway from SAPVIA's side at the moment. However, she noted that during the last meeting it was mentioned that SAPVIA would engage with the Energy Intensive User Group (EIUG), who are expected to formulate a formal position on the RTP by next year. • RM will provide updates to the working group if there are any developments. • OJ added that he had already reached out to the Energy Council, to explore potential collaboration on a response. • As a next step, OJ suggested SAPVIA compile and summarise the key comments that were overlooked in the final RTP decisions,	

	potentially forming the basis for a consolidated industry position going forward. • DM asked about the current state of reconciliation for wheeling, specifically whether monthly reconciliation is still being used or if there's a shift towards hourly or half-hourly reconciliation. • OJ confirmed that Eskom is still using monthly Time-of-Use (TOU) reconciliation for both traditional and virtual wheeling, with no clear indication of moving to a more granular reconciliation period. • The city of Cape Town is the only distributor known for using half-hourly reconciliation. Other distributors seem to be following Eskom's lead on this matter.	
	2.3 Regulations and Policy **2.3.1 Policy tracker** 2.3.2 JM reported that there has been little movement on the policy tracker, which is still being updated. The updated version will be shared with the working group, hopefully before the next meeting. **2.3.3 IRP** • JM mentioned that the NEDLAC review is completed, and the Energy Council submitted a note on the IRP to NEDLAC, which will be passed on to the Minister and eventually Cabinet. • RM: • Added that the submission was led by BUSA as part of the business constituency, with the Energy Council providing support due to capacity constraints within BUSA. • SAPVIA was one of six organizations represented in the business constituency. • Noted that there were some contentious issues, but a broad alignment on 10 key issues was reached. • The Department informed the business constituency that the Minister has the prerogative to make adjustments to the IRP, even outside of the model's recommendations. • Concluded by stating that once there is movement, NEDLAC will update the business constituency, and SAPVIA will be among the first to receive the update, which will be shared with the group. **2.3.4 Congestion curtailment approval** • JM confirmed that the framework has been approved, as discussed in the previous meeting, and Eskom is currently deliberating on the capacity to be made available in the Eastern and Western Cape.	**Jigisha M - Lead** DeVilliers B Oliver J Jeandre Z Wessel W

	• Eskom is expected to release information on the available capacity and allocation process by the end of August. **2.3.5 NERSA consultation on IGCAR** • JM: • NERSA has released a consultation paper on grid allocation rules, which would apply to all network service providers, including Eskom distribution and transmission, as well as municipal networks. • The rules are intended to be all-encompassing and include criteria for public comment. • The proposed rules differ from the Interim Grid Capacity Allocation Rules (IGCAR) developed by Eskom and may be more onerous. • NERSA is seeking input on whether the rules should be determined by the licensee or NERSA, or if a framework approach similar to the Wheeling framework should be adopted, where NERSA provides high-level guidance and details are left to the relevant parties. • RM: • SAPVIA received a request from the Energy Council to join a consolidated industry submission to NERSA, with several major industry bodies including SAPVIA, SAWEA, SAIPPA, SAESA, and EIUG. • SAPVIA received a request from the Energy Council (not B4SA in this instance) to join a consolidated industry submission to NERSA. • This request was circulated to several major industry bodies including SAPVIA, SAWEA, SAIPPA, SAESA, and EIUG. • SAPVIA is not opposed in principle to contributing to a joint submission but is of the view that individual associations should also submit their own comments to ensure their views are formally and directly recorded by NERSA. • Eskom Distribution is currently engaging with industry associations on a separate process to update and formalize the Interim Grid Capacity Allocation Rules (IGCAR) into permanent rules. • SAPVIA recently participated in a joint session with SAWEA and the Grid Access Working Group (GAWG) to review the existing IGCAR criteria, provide detailed input on each criterion, and began a process to consolidate these inputs for formal submission. • The chairperson of NERSA expressed openness to a meeting with key stakeholders.	

	• SAPVIA plans to raise both general concerns with NERSA and specific issues related to grid access, ideally with participation from the board and relevant working group chairs.	
	2.4 Technical **2.4.1 Grid Code Compliance - Thresholds and Nameplate** • DM: • The technical workstream group examined why nameplate capacity—the maximum possible output of a plant—is often used by authorities to classify plants for compliance purposes. • Grid stability and compliance risks are more directly related to actual power injected onto the grid, not just installed (nameplate) capacity. • This distinction becomes important in scenarios where plants may be over-sized (nameplate) but limited in export capacity due to agreements or curtailment. • The Technical Workstream agreed that there is room to engage regulators on this nuance, advocating for a more practical compliance approach that reflects real operational behaviour rather than theoretical max output. • The group is not suggesting the removal or downgrading of essential electrical safety and protection systems, such as MV protection, fault protection or electrical relays. • The key area where change is being suggested relates to SCADA visibility. The workstream proposes reassessing the level of SCADA monitoring imposed on plants, especially for smaller installations (e.g., 1–10 MW range), where such requirements may be disproportionately onerous. **2.4.2 Grid Code Compliance – Municipalities** • DM: • Many municipalities lack in-house technical capacity to interpret grid code compliance data or assess SCADA integration and electrical design. • This capability gap leads to delays and inconsistencies in project approvals. • As a potential solution the group discussed the idea of establishing a network of “approved organisations” or “pre-authorised consultants”. • These entities could support municipalities that lack technical skills, act as independent reviewers of plant compliance in the	**Dermot M - Lead** Basetsana M Hennie H Jigisha M Julian D

absence of or in addition to RETEC, and ensure national consistency and project throughput, especially in smaller jurisdictions

- The outcome of the meeting was a plan to develop a White Paper that describes the technical issue and provides context, outlines the problem statement for the industry, and presents suggestions and implications for regulators and developers
- The White Paper will be circulated to the Grid Code Advisory Committee and Retec, with the goal of holding workshops with them before the end of the year.

2.4.3 Compliance and Quality Assurance for Plants

- DM:
- Raised a question regarding the comfort level of municipalities in ensuring that plants are compliant without relying on third-party inspections.
- Expressed concerns about poor-quality installations jeopardizing the industry and suggested that irresponsible individuals might sign off on projects for financial gain without proper oversight.
- The discussion highlighted the importance of maintaining trust in the technology and giving regulators the necessary comfort. To address this, the following ideas were floated: Having professionally registered engineers take responsibility for the work, similar to advocates, attorneys, or chartered accountants. Establishing pre-authorized entities that have undergone training or demonstrated understanding of the grid code. Allowing these pre-authorized entities to sign off on plants, providing a level of comfort that the plants are compliant.
- These ideas aim to ensure that plants meet compliance standards and maintain the trust of regulators and the industry.
- SAPVIA (OJ) and partners have initiated discussions with the City of Cape Town and RETEC focusing on leveraging DigSilent modelling as a streamlined compliance pathway.
- This approach could help streamline the application and compliance process, reduce time and cost burdens on developers and still maintain system integrity and regulator confidence.
- The final solution may be a hybrid model, drawing from professional sign-off mechanisms, pre-approved service providers digital modelling tools like DigSilent and RETEC testing only when justified by risk or uncertainty

3.	**Any Other Matters** **3.1 Rectifier - Large Battery** • DM: • Introduced a technical workaround concept involving the use of a rectifier to charge a large battery, enabling the installation of a significantly larger embedded generation system behind the battery, without direct electrical connection to the grid. • Example: With an NMD of 1 MW, one could potentially install a 24 MWh battery and charge it via rectifier, while the embedded generation system sits entirely behind the meter. • From the grid's perspective, this setup appears only as a load, not as a generation source—thus bypassing CATB (Code of Practice for the Assessment and Testing of Embedded Generation) requirements. • Noted this as a regulatory grey area, asking if others had implemented similar setups and whether any formal approvals had been granted. • JP: • Confirmed two active sites using this method - • Site 1 (Eskom): 300 kW grid connection, 2.5 MW of hard rectifiers and battery storage. Eskom had no objection, viewing it purely as a load. The system has been operational for three years. • Site 2 (City of Cape Town): Similar configuration raised questions about regulatory interpretation. RETEC's position aligned with Eskom's—no grid compliance is needed as the system is not grid-connected behind the DC rectifier. • However, the City of Cape Town took a different view, considering the combined AC output of inverters, PCS, and generators to calculate system capacity—thus triggering compliance thresholds (e.g. >1 MW triggers CATB). • DM highlighted that while this workaround is technically sound and grid-stable, regulatory clarity is needed. The current position creates a loophole that developers may rely on, though it lacks formal recognition in the codes. • OJ: • Noted that the root issue is the outdated nature of the grid codes, which do not adequately address hybrid prosumer models (systems that both consume and generate power). • Updating the grid codes is essential to create regulatory certainty and avoid inconsistent interpretations.	**All**

	• Suggested a future update from NRS workgroup (NECOM involvement) at the next meeting on the progress with grid code revisions.	
5.	**Closure** With a vote of thanks, the chairperson formally closed the meeting. ***Next meeting: 10 September 2025***	**Chairperson**

Action Items

No:	Actions	By Whom
1.	Develop a draft White Paper for offtakers on Power Purchase Agreements (PPAs) and circulate for feedback.	**CP/HH**
2.	Municipal Wheeling Framework • Engage with Sustainable Energy Africa to discuss municipal wheeling framework progress and updates. • Meet with NERSA to understand their role in approving municipal wheeling frameworks and their involvement in the process.	**OJ**
3.	Develop a White Paper outlining the technical issues, problem statement, and proposed solutions, and circulate it to the Grid Code Advisory Committee and Retec for discussion and feedback. Schedule a meeting with Ishmael Jeffries (City of Cape Town), representatives from Ekurhuleni, City Power, and eThekwini to coordinate and incorporate their feedback into the white paper draft.	**Technical Workstream** **DM**