



SAPVIA- Distributed Generation WG Agenda

Date: 13 May 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:
Note taker:	Thabang Molai (TM)	Jigisha Mandalia (JM)
		Dermott Murphy(DM)
		Claude Peters (CP)
		DeVilliers Botha (DB)
		Hennie Hanekom (HH)
		Jeandre van Zyl (JZ)
		De Wet Taljaard (DT)
		Alecia Pienaar (AP)
		Ross Train (RT)
		Mike Bleyenheuft (MB)
		Lee Smith (LS)
		Motjatji Malatji (MM)
		Fortune Nosi(FN)
		Carla Carr (CC)
		Basetsana Molefyane (BM)
		Monika Loots (ML)
		Shaun E (SE)
		Carel Landman (CL)
		Dr Rethabile Melamu (RM)
		Sinethemba Mnguni (SM)
		Zimkita Bilibana (ZB)

Agenda

1.	Opening	Chairperson
	<p>Welcome and Introduction The chairperson welcomed everyone to the working group meeting and acknowledged attendees for making time to attend.</p> <p>Apologies Tanya Jooste (TJ) Claude Peters (CP) – Early Departure</p> <p>Agenda The agenda was adopted with no amendments.</p>	

	Minutes The minutes of the previous meeting were accepted as a true reflection of the meeting proceedings.	
2.	Election of Deputy Chairperson <ul style="list-style-type: none"> • OJ: • Opened the discussion by noting that the group had not yet finalised the appointment of a Deputy Chairperson. • Mentioned that Wessel Wessels and Patrick Narbel had previously been nominated but had not attended the last two meetings. Given this, he suggested reopening nominations for the role. • Suggested that leaders of the different workstreams consider taking on the Deputy Chair role. • Jigisha and Dermott Murphy have come forward to express their interest in taking on the deputy chair role. • ZB suggested appointing both Jigisha M and Dermott M as Co-Deputy Chairpersons to avoid the need for a vote and ensure continuity in case one is unavailable. • This proposal received full support from the Chair and was unanimously agreed upon by attendees, including both nominees. • Both individuals accepted the roles. 	Zimkita B
3.	Workstreams	
	3.1 Embedded Projects 3.1.1 PPA White Paper <ul style="list-style-type: none"> • CP: • Explained that one of the deliverables in the embedded project workstream involves developing a White Paper for offtakers. • The purpose of this White Paper is to guide potential offtakers on what to consider when entering into PPAs, and to provide clarity to the market, especially given increasing concerns and confusion around PPA viability as an alternative to Eskom-supplied energy. • HH: 	Claude P - Lead Agreepa M Avesh P Boitumelo M Hennie H Jeandre Z Mandisa M Martin K Tanya J Jacques B

	<ul style="list-style-type: none"> • There is growing uncertainty in the market regarding PPAs, especially about their adequacy as reliable alternatives to Eskom supply. • Recent negative press has cast doubt on the reliability, cost-effectiveness, and long-term viability of PPAs. • Despite this, PPAs may still offer better pricing structures and other benefits — hence the need to educate and inform potential offtakers. • The White Paper aims to provide a clear framework to help offtakers evaluate PPA offers, and highlight the track record of PPA suppliers, including financial robustness, operational capacity and delivery experience, and emphasize transparency around which party is responsible for the solution, especially when functions such as maintenance or asset management are subcontracted. • One of the most critical evaluation criteria is the tariff structure, including escalation mechanisms over time, and clarity on any price carve-outs or exclusions. • Offtakers must understand what drives cost increases, and how those increases are managed or limited. • The White Paper should help offtakers evaluate whether cost savings from PPAs are realistic and sustainable, the guaranteed availability of the alternative energy supply, and the long-term benefit of PPAs hinges not only on savings but also on reliable energy delivery over time. • Offtakers must understand the implications of each structure and choose based on their operational and financial goals (PPAs -take-or-pay or ESAs - pay-as-you-use). • JZ: • Raised critical concerns regarding the application and transparency of CPI escalations within South African PPA agreements. • What is the CPI used in PPAs? Who calculates it, and is it transparent? Is there a sector-specific CPI or are suppliers simply using national CPI figures from Stats SA? • Emphasized that most PPAs in the market reflect a 6–7% escalation rate, despite the national CPI for 2025 being only 3.2%. • Noted that this disconnect between national CPI and market-applied escalations suggests an industry norm that may not be fully understood or justified, especially by end-users and financiers. • OJ: 	
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	<ul style="list-style-type: none"> • CPI in most agreements is based on the rolling 12-month national CPI average published by Stats SA. • The CPI used in escalations is not based on project-specific metrics (e.g., debt/equity ratio, operational costs), but rather public national inflation data. • While the national CPI is not industry-specific, contract terms can vary, and escalation structures may include fixed rates (e.g., 4%, 7%) or CPI +2%, CPI –2%). • JZ: • Given the growth and cost dynamics within the renewable energy sector, a sector-specific CPI might reflect a higher rate — potentially closer to 13% annually. • Noted that based on discussions with financiers and banks, the renewable energy sector is the fastest growing industry in South Africa, which may justify higher escalations from a commercial point of view — but not necessarily align with the consumer-protection principles that CPI is meant to represent. • CP: • Suggested the need for a separate discussion with financial institutions and banks to clarify whether a national or sector-based CPI should be considered standard practice. How escalation clauses are assessed during project finance reviews and their impact on bankability and end-user costs. 	
	<p>3.2 Wheeled Projects</p> <p>3.2.1 Virtual Wheeling</p> <ul style="list-style-type: none"> • OJ: • Provided an update on recent activities under the Wheeling Workstream, which included Eskom Engagements, NERSA Engagements and • Municipal Engagements. • Eskom confirmed that the Virtual Wheeling pilot with Vodacom has concluded, and the platform is now open for broader participation. • Applications can be submitted via Eskom’s portal, though the system remains only semi-automated, with Eskom working with third parties to improve functionality. • Eskom’s documentation defines various roles (corporate entity, management agent, buyer, trader, reseller), though overlaps exist. 	<p>Oliver J - Lead</p> <p>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</p>

	<ul style="list-style-type: none"> • Eskom currently does not support traders acting as buyers under virtual wheeling. • Acceptable buyers include corporate entities, new entities established by a group of corporates and authorized management agents acting on behalf of corporates. • Eskom requires an 80% offtake commitment from Eskom-account customers before grid capacity is allocated to a generator. • If 80 MW of offtake is secured, 100 MW of grid may be allocated, allowing 20 MW for additional uses like virtual wheeling. • There is no current process for grid allocation purely under virtual wheeling. However, Eskom acknowledged that adapting their current approach to accommodate this could be feasible. • The criteria for determining a municipality's "good standing" remain unclear. • Eskom now defers to the National Treasury and the Auditor-General for such assessments rather than evaluating municipalities directly. • A key challenge is that Treasury reports are only annual, while Eskom prefers monthly billing and settlement cycles. • JZ: • Noted that a meeting with NECOM is scheduled for next week to explore generator billing structures that would allow wheeling through municipalities in debt. • The proposed structure would see generators pay Eskom directly for amounts due from municipalities, effectively incorporating municipal debt into the wheeling PPA. • Acknowledged this is a novel and complex proposal, and he will circulate a memo and feedback following the NECOM meeting. • OJ: • Eskom indicated that the refund timeline under the virtual wheeling framework is 45 days after the billing cycle. • For example, if billing is conducted for February, the refund will be processed by mid-April, based on the status of the municipality during February. • Changes to a municipality's status after the billing month (e.g., defaulting in March) would only affect payments related to that later billing cycle. • Eskom emphasized that the risk lies entirely with the buyer under the virtual wheeling model. 	
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	<p>3.2.2 Portfolio Wheeling</p> <ul style="list-style-type: none"> • OJ: • Eskom is aiming to open up portfolio wheeling in Q2 or Q3 of this year. • This would apply to bilateral Eskom-to-Eskom wheeling arrangements. • The key feature of portfolio wheeling is that it allows participants to aggregate multiple points of delivery (PODs) or connection, enabling them to manage wheeling on a pooled basis rather than per individual site. • This allows greater flexibility in matching generation with offtake across a network of sites, improving operational and billing efficiency. • In contrast to site-specific bilateral wheeling, portfolio wheeling removes the need to match time-of-use generation and consumption at each site individually. • Under virtual wheeling, the refund is processed 45 days after the billing cycle. • Under portfolio wheeling, rebates and credits are applied in the same billing cycle, improving cash flow and reducing credit risk for the buyer. <p>3.2.2 Curtailment</p> <ul style="list-style-type: none"> • Eskom (Keith) confirmed that curtailment will initially be implemented in the Cape regions, due to current grid constraints. • However, curtailment is not exclusive to the Cape and will be extended to other areas (e.g., Free State, Northwest) as grid capacity is reached. • Curtailment is intended to be technology-agnostic, although much of the focus has been on wind, Eskom's position is that any technology (e.g., solar PV) could be curtailed if required by grid conditions. • Eskom maintains the right to curtail wheeled energy, if necessary, as part of broader grid balancing and stability efforts. • Discussion included the reconciliation of wheeled power and how this aligns with TOU structures. • Hourly reconciliation is under consideration but not yet confirmed. • Eskom is exploring this in the context of balancing mechanisms, including potential BESS and other grid-supporting technologies. 	
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	<ul style="list-style-type: none"> • If balancing capacity is successfully procured and deployed, the need for hourly reconciliation may diminish. • However, if balancing capabilities lag, Eskom may be pushed toward implementing hourly reconciliation more aggressively. 	
	<p>3.3 Regulations and Policy</p> <p>3.3.1 Curtailment Rules</p> <ul style="list-style-type: none"> • JM highlighted that curtailment is likely to remain a short-term mechanism. • There is recognition that ongoing expansion of transmission infrastructure is necessary, as part of the TDP. • Investment in grid expansion and development of transmission corridors was discussed as the long-term solution, ultimately benefiting all technologies. <p>3.3.2 IRP</p> <ul style="list-style-type: none"> • JM reported that the IRP is currently under review by Nedlac and is expected to proceed to Cabinet for approval. • The original timeline for approval (June) has already been delayed. • OJ raised the question of whether the IRP is intended as a market-guiding framework or a strict, enforceable roadmap. • JM initially suggested that it may be prescriptive, based on recent regulatory shifts and delays in updating policy documents. • However, RM later clarified that the Government is officially on record stating that the IRP is a guideline, not a prescriptive document. • This point was emphasized during a recent bilateral meeting between business representatives and government. • Business stakeholders, including SAPVIA, are pushing to have this interpretation formally stated within the IRP document itself. • RM confirmed that SAPVIA is one of six business representatives at Nedlac. • SAPVIA has been actively engaged and is monitoring key developments, particularly areas where business feels key policies like SAREM were not considered in the IRP modelling. • If treated as a guideline, industry participants are expected to proceed with development based on market signals and 	<p>Jigisha M - Lead DeVilliers B Oliver J Jeandre Z Wessel W</p>

	<p>system requirements, rather than being constrained by fixed targets.</p> <ul style="list-style-type: none"> • JM noted that attempts to limit new projects may not be practical, as not all registered projects proceed, and the energy crisis context still justifies new capacity. • The role of the System Operator will remain central in balancing demand and supply dynamically. • Greater transparency on how procurement planning will be communicated post-Cabinet approval. • RM and JM agreed to touch base ahead of the next meeting to ensure aligned feedback from SAPVIA's side. <p>3.3.3 Incentives</p> <ul style="list-style-type: none"> • JM: • A recent notice has been published relating to the review of tariffs and potential changes to rebates in the solar, wind, and battery value chain. • This development could act as a disincentive for investment in the sector. • Requested clarity from the SAPVIA secretariat regarding the status of comment submissions and consolidation efforts. • RM: • The current deadline for submission of comments is this week, SAPVIA will request an extension from ITAC as it is still gathering member input. • SAPVIA has issued a call for comments and is consolidating feedback. • A session will be convened with ITAC to present findings from two SAPVIA-commissioned localization reports, which highlight that the proposed tariffs lack a supporting study or analysis. • Additionally, RM and the SAPVIA Chairperson are scheduled to meet the Deputy Minister of Electricity and Energy to escalate concerns. • Although ITAC falls under DTIC, not the Deputy Minister's direct mandate, RM has been tasked with implementing the SAREM (South African Renewable Energy Masterplan). • SAPVIA aims to ensure the Minister understands the local industry's current limitations and the unintended consequences of a blanket localization approach not grounded in data. • Feedback from the engagements will be shared with members via SAPVIA's official communication channels. 	
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	<ul style="list-style-type: none"> • DB: • The existing tariffs should protect genuinely local manufacturing. There are allegations in ongoing litigation that a previous applicant for tariffs had not actually manufactured locally but instead imported and rebranded products. • This undermines the purpose of protective tariffs and calls for stricter due diligence. • Reiterated that South Africa remains energy poor, despite some improvements in alternative energy rollout. • Pointed to recent Eskom data showing one of the lowest energy availability factors to date and noted that current reduced load shedding could also be a result of suppressed demand due to economic slowdown. <p>3.3.4 Policy & Regulation</p> <ul style="list-style-type: none"> • JM: • SAPVIA is currently compiling a comprehensive list of all relevant policies and regulations impacting the sector. • The list will indicate the relevant government department or entity, the current status of each policy or regulation, and links to official documentation. • The intent is to create a user-friendly reference guide for members and to identify potential policy gaps or areas requiring advocacy. • Once the list is updated, it will be shared with all members. • OJ: • Welcomed the policy document initiative, describing it as a potentially valuable and practical resource. • Emphasised that once finalised, the document will help in identifying focus areas and guide more targeted engagement efforts. <p>3.3.5 RTP</p> <ul style="list-style-type: none"> • OJ: • Raised concern about the recent RTP adjustment approved by NERSA, noting that Eskom has increased behind-the-meter costs and the Wheeling rebate was substantially reduced without transparent rationale or data. • Highlighted that some industry players are considering legal options, while others are observing. • Proposed that SAPVIA, possibly in collaboration with the Energy Council, coordinate a formal industry response. 	
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	<ul style="list-style-type: none"> • This would take the form of a document summarizing key questions, data requests, and the anticipated impact on market participants. • Emphasized that this document could pressure Eskom/NERSA by highlighting potential for legal scrutiny, without pursuing immediate litigation. • RM: • Confirmed that SAPVIA had submitted both written and verbal inputs on the draft RTP to Eskom during the NERSA process. • Acknowledged, however, that Eskom did not incorporate SAPVIA's feedback in the final approval. • Confirmed SAPVIA had received similar concerns from members and had started engagements with the Energy Intensive Users Group (EIUG). • Noted that a legal challenge could be slow, given parliamentary approval of the RTP, but future-facing action is still viable. • Welcomed the idea of collaboratively packaging inputs for a more formal follow-up with NERSA, rather than Eskom directly. • JM: • Recommended a forward-looking approach, focusing on the methodology and justification for the RTP changes. How future RTP frameworks will accommodate increased low-cost renewables. • Suggested identifying the specific Eskom division involved in RTP decisions (likely Distribution). 	
	<p>3.4 Technical</p> <p>3.4.1 Grid Code Compliance - Embedded Generation Projects</p> <ul style="list-style-type: none"> • DM: • Provided a summary of recent engagements held with the technical team, focusing on grid code compliance issues, specifically for embedded generation projects (i.e., projects that do not export to the grid). • The team assessed scenarios where the plant only serves auxiliary loads or includes battery storage, with the view that such systems should not be considered traditional "generators" for compliance purposes. • Noted that the current Grid Code was developed for grid-connected generators, which complicates compliance for embedded systems. • A meeting was held with RETEC to discuss the appropriate point of measurement for compliance testing. 	<p>Dermot M - Lead Basetsana M Hennie H Jigisha M Julian D</p>

	<ul style="list-style-type: none"> • An in-principle agreement was reached (awaiting formal confirmation) that the point of compliance measurement should be at the common generation bus, before the loads, rather than the traditional point of connection (POC) to the grid. • This adjustment would help isolate the generation component from on-site loads in compliance assessments. • Many sites have critical infrastructure that cannot be disconnected to facilitate compliance testing. • Generators typically do not control on-site load consumption, making traditional testing methods impractical. • This proposal enables a more pragmatic and realistic approach to compliance for embedded systems, representing a positive shift in regulatory interpretation. • OJ: • Oliver raised the issue of potentially incorporating a "prosumer" definition into the Grid Code to better reflect the realities of systems that are both consuming and generating electricity (i.e., not strictly generators or consumers). • Enquired whether RETEC had provided any indication of the process or timeline for such an amendment. • DM: • No timeline or process details were shared by RETEC regarding the inclusion of a prosumer category in the Grid Code. • Discussions have been held with the appropriate stakeholders at RETEC, but the prosumer concept was not specifically addressed in those meetings. It remains a relevant topic for future engagement and formal proposal. <p>3.4.2 Grid Code Compliance – BESS</p> <ul style="list-style-type: none"> • DM: • The technical subcommittee also discussed the process for assessing grid code compliance for plants that integrate Battery Energy Storage Systems (BESS) into existing generation systems. • Noted that RETEC has published a clear set of guidelines on the testing requirements for hybrid or hybridized plants. • RETEC process include testing the PV system in isolation, testing the BESS in isolation and testing hybrid conditions, including PV generating and charging the BESS. PV generating while the BESS is also grid-charged. • RETEC provides a table of required permutations for compliance testing in hybrid configurations. 	
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	<ul style="list-style-type: none"> Plants that exceed the 1 MW threshold must complete all relevant compliance testing, including when a BESS is added. Offered to share the RETEC document with the team for reference. <p>3.4.3 Grid Code Compliance - Thresholds and Nameplate</p> <ul style="list-style-type: none"> DM: The subcommittee also discussed how to define the threshold for grid code compliance, particularly for hybrid plants with PV and BESS installations. A key question raised was whether a facility should be treated as a Category B plant (subject to more stringent compliance requirements) if, for example the transformer is rated at 900 kW, but the combined nameplate capacity of the inverters and BESS exceeds this, e.g. 500 kW inverter + 500 kWh battery. This is especially relevant for A/C coupled systems where the sum of nameplate capacities (PV and BESS) may exceed the NMD, particularly when designed to fully support the site load. The subcommittee recommended that compliance thresholds be based on potential grid export capacity, not just aggregate nameplate values. However, given the earlier agreement to shift the point of measurement to the generation node (before the loads), the need to calculate grid export separately is reduced. Overall, this approach provides greater clarity that compliance is assessed based on the generation nameplate capacity. Loads are excluded from the compliance measurement. Compliance is not measured at the point of connection (POC) but at the common generation bus. <p>3.4.4 Grid Code Compliance – Municipalities</p> <ul style="list-style-type: none"> DM: Highlighted an upcoming meeting with eThekweni Municipality to explore challenges related to grid code compliance in contexts where municipalities lack SCADA functionality. Noted that the grid code assumes SCADA integration, enabling the grid operator to monitor and control generation plants in real time. In instances where the *municipality lacks SCADA, and the plant does not export to the grid. The rationale for full compliance becomes unclear. 	
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	<ul style="list-style-type: none"> • This creates a challenge for developers and owners needing compliance confirmation, and financiers and LTAs requiring formal documentation for investment decisions. • The team is seeking clarity on whether exemptions can be obtained through Retec, or how municipalities themselves can define reasonable alternative compliance mechanisms. • OJ proposed that this issue be added to the Sustainable Energy Africa agenda, given SEA's role in advising municipalities. <p>3.4.5 Grid Code Compliance - "Off-the-shelf" Compliance Approach</p> <ul style="list-style-type: none"> • DM: • Provided an additional update from the subcommittee, which explored the possibility of an "off-the-shelf" compliance approach, similar to the simplified connection criteria in NRS 097. • The conclusion was that such a standardized approach is not feasible, due to the significant variability in project configurations, including cable lengths and sizes, distance between point of connection and point of generation, and plant-specific inverter and control system setups. • While a system-level template is impractical, there is still value in ensuring early and accurate collection of component-level data from suppliers (often overlooked) and requesting DigSilent models for inverters and power plant controllers, using these to build a more reliable and accurate overall power system model for grid compliance testing. • Emphasised the importance of integrating component-level templates into the modelling process from the outset to avoid delays and ensure robust compliance preparation. 	
5.	<p>Closure</p> <p>With a vote of thanks, the chairperson formally closed the meeting.</p> <p><i>Next meeting: 08 July 2025</i></p>	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.	Schedule follow-up session with banks to discuss CPI escalation definitions and implications.	CP/HH
3.	3.1 Municipal Wheeling Framework <ul style="list-style-type: none"> 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
4.	Give feedback on the NECOM meeting (Implications for wheeling through indebted municipalities).	JZ
5.	5.1 ITAC <ul style="list-style-type: none"> Finalize and submit consolidated member comments to ITAC. Provide updates to members on the outcomes of engagements. 	Secretariat RM
6.	6.1 RTP <ul style="list-style-type: none"> Coordinate a formal industry response to the recent RTP adjustment, in collaboration with the EIUG Liaise with the Energy Council to understand their current efforts. 	RM OJ
7.	Set up a meeting with Leon Swart or relevant individuals at the City of Cape Town to gauge their position on grid code compliance in the absence of SCADA and explore any room for flexibility or innovative approaches.	DM