REQUEST FOR INFORMATION (RFI) FOR PANEL OF BATTERY ENERGY STORAGE SYSTEM (BESS) SERVICE PROVIDERS FOR RAND WATER PUMPING OPERATIONS FOR AN AGREED DURATION

ISSUE DATE:	**THURSDAY, 05 FEBRUARY 2026**	
NON-COMPULSORY BRIEFING SESSION DATE:	**THE SCHEDULE WILL BE ISSUED SEPARATELY NO LATER THAN 5 DAYS AFTER THE RFI ADVERTISMENT**	**TIMES WILL BE ON SCHEDULE**
BRIEFING SESSION VENUE:	**VENUES WILL BE ON THE SCHEDULE**	
CLOSING DATE:	**THURSDAY, 26 FEBRUARY 2026**	**AT 16 :30PM**

BIDDER INFORMATION				
BIDDER NAME				
POSTAL ADDRESS				
STREET ADDRESS				
TELEPHONE NUMBER	**CODE**		**NUMBER**	
CELLPHONE NUMBER				
E-MAIL ADDRESS 1				
E-MAIL ADDRESS 2				
VAT REGISTRATION NUMBER				
SUPPLIER COMPLIANCE STATUS	**TAX COMPLIANCE SYSTEM PIN:**		**CENTRAL SUPPLIER DATABASE No:**	MAAA…….
B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE	[TICK APPLICABLE BOX] ☐Yes ☐No		**B-BBEE STATUS LEVEL SWORN AFFIDAVIT** (EMEs and QSEs)	[TICK APPLICABLE BOX] ☐Yes ☐No

BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO:			
BUYER		**SOURCING MANAGER**	
CONTACT PERSON	**SANDISILE ZULU**	**CONTACT PERSON**	**TSHEPO MORARE**
TELEPHONE NUMBER	**011 682 0708**	**TELEPHONE NUMBER**	**011 682 0708**
E-MAIL ADDRESS (Submissions must be made to this address)	*Rand Water Head Office | 522 Impala Road | Glenvista | 2058 (in the Bid Submissions Box at the Main Gate)*	**E-MAIL ADDRESS**	tmorare@randwater.co.za sazulu@randwater.co.za

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1. DISCLAIMER

This Request for Information (RFI) is issued solely for information and planning purposes and does not constitute a solicitation of bid. While all reasonable care has been taken in preparing this Document, the information has been prepared by Rand Water in good faith, based on information obtained from various sources. However, RAND WATER neither accepts any liability or responsibility for the adequacy, accuracy, or completeness of any of the information or opinions stated herein.

Where expressly stipulated otherwise, no representation or warranty (whether express or implied) is or will be given by the RAND WATER or any of its officers, employees, servants, agents, advisors, or any other person with *respect* to the information or opinions contained in this Document.

RAND WATER reserves the right to amend, modify or withdraw this Document or any part thereof, or to terminate or amend any of the procedures, processes or requirements detailed in this Document at any time, without prior notice and without liability to compensate or reimburse any Government, Organisation, or person pursuant to such amendment, modification, withdrawal, or termination.

RAND WATER reserves the right to adopt any proposal made by any person responding to this Document at any time and to include such proposal in any documents which may or may not be made available to any other persons responding to this Document, without the obligation or liability to pay any compensation or reimbursement of any nature to any Government, Organisation, or person pursuant to such adoption. The terms and conditions set out in this Document are stipulated for the express benefit of RAND WATER.

This Document is provided solely for the purpose set out herein and is not intended to form any part or basis of any commitment, investment decisions or expectations by the Respondent (responding to this RFI), its shareholders, members, or its lenders outside of this RFI. Each person that accesses this Document must make its own independent assessment of the Project in respect of which it intends submitting a RFI Response, taking

such advice (whether professional or otherwise) as it deems necessary. If a portion of the information to be supplied is considered commercially sensitive by the respondent, RAND WATER will consider entering into an appropriate Non- Disclosure Agreement. Respondents to this RFI must in addition declare whether, if any part of their submission is a registered Intellectual Property (patent, copyright, etc.)

No Respondent, its shareholders, members, contractors, suppliers or lenders shall have any claim against RAND WATER, its officers, employees, servants, agents or Transaction Advisors, under any circumstances whatsoever, arising out of any matter relating to this RFI, any ancillary matter relating thereto or this Document of any nature whatsoever, including where such claim is based on any act or omission by RAND WATER, or any of its officers, employees, servants, agents or Transaction Advisors of any nature whatsoever, or where such claim is based on the content of, or any omission from, this Document of any nature whatsoever.

Participation in this RFI does not create any legitimate expectation of future appointment and does not oblige Rand Water to issue a Request for Proposal (RFP) or appoint any respondent. Any subsequent procurement process that may arise from the outcomes of this RFI will be conducted strictly in accordance with section 51(1)(a)(iii) of the PFMA, as well as Rand Water's SCM prescripts, ensuring that all procurement principles of fairness, equity, transparency, competitiveness, and cost-effectiveness are upheld.

1.1 Intellectual Property and Use of Information

All intellectual property rights in pre-existing proprietary technologies, methodologies, designs, software and know-how submitted by respondents shall remain vested in the respondent.

By submitting a response to this RFI, respondents grant Rand Water a non-exclusive, royalty-free, irrevocable right to use, reproduce, analyse and internally distribute the information contained in the submission for purposes of evaluation, planning, governance, strategy development and the preparation of any future procurement documentation.

Rand Water shall not be restricted from developing its own specifications or procuring similar or alternative solutions from third parties, provided that it does not unlawfully disclose confidential proprietary information.

2. PURPOSE

Rand Water is a Schedule 3B public entity governed by, inter alia, the Public Finance Management Act, 1999 (PFMA), applicable National Treasury Regulations, and its approved governance frameworks.

This Request for Information is issued solely for planning and market-testing purposes. Any future procurement, concession, shared-savings, wheeling, energy trading, or asset-based arrangement arising from information obtained through this RFI shall be subject to:

- compliance with the PFMA and National Treasury Regulations;
- internal governance processes, including approval by Rand Water's Executive Management and Board.

No response to this RFI shall be construed as creating any binding obligation on Rand Water.

Therefore, Rand Water invites qualified Original Equipment Manufacturers (OEMs), Engineering–Procurement–Construction (EPC) contractors and System Integrators to submit information relating to the supply, integration, and lifecycle support of Battery Energy Storage Systems (BESS) for bulk water pumping operations.

The primary objective is to:

- Reduce electricity costs for Time-of-Use (TOU) tariffs, and
- Maintain uninterrupted pumping operations during Eskom/ Municipal power supply down times.

The BESS shall be integrated and operated in parallel with the electrical grid and other power sources such that no pumping interruption, derating, or transient instability occurs at any point. This RFI is purely informational and will inform Rand Water's subsequent technical specifications, commercial strategy, and capital planning.

3. BACKGROUND

Rand Water is a Schedule 3B State Owned Entity (SOE) responsible for the abstraction, treatment, and bulk supply of potable water to municipalities, industries, and mines across Gauteng province mainly. The organisation operates one of the largest bulk water pumping and distribution systems in the world, supplying water to an economic heartland that accounts for a significant portion of South Africa's gross domestic product.

The reliability and continuity of Rand Water's pumping operations are therefore strategic to national water security, economic stability, and public health. Rand Water's pumping infrastructure is highly energy-intensive, relying predominantly on large electrically driven pump sets operating continuously to meet contractual demand obligations. These operations are supplied through a combination of Eskom and Municipal electrical networks and are subject to Time-of-Use (TOU) electricity tariffs, which impose significantly higher operational costs.

Based on current measured data, Rand Water's aggregated average electrical demand across key pumping stations is approximately 271 MW, of which approximately 190 MW is Eskom-supplied, and 81 MW is supplied through Municipal or alternative distributors. Major energy-intensive stations include Zuikerbosch, Palmiet, Zwartkopjes, and Eikenhof, each supporting critical bulk supply corridors within the Integrated Vaal River System.
In recent years, Rand Water has experienced increasing electricity cost escalation, driven by:

- Rising Eskom tariffs under the Multi-Year Price Determination (MYPD) regime,
- Differential peak, standard, and off-peak tariff structures,
- Growing exposure to municipal electricity tariff variability, and
- Increasing emphasis on grid stability and demand management from electricity suppliers.

Given the non-discretionary nature of water pumping, Rand Water has limited operational flexibility to reduce or interrupt load during peak tariff windows without adversely affecting water supply reliability. Consequently, Rand Water is pursuing technologies and system architectures that enable energy cost optimisation without compromising pumping continuity or hydraulic performance.
Battery Energy Storage Systems (BESS) have emerged globally as a mature and utility-scale technology capable of:

- Shifting electrical energy consumption from peak to off-peak periods,

- Reducing exposure to peak electricity tariffs,
- Improving power quality and voltage support,
- Enhancing operational resilience and energy system flexibility.

However, the application of BESS within large-scale, mission-critical water pumping systems introduces specific technical, operational, and safety considerations. These include:

- Seamless parallel operation with grid supply,
- Zero-interruption pumping under all battery states of charge,
- Integration with high-power motors and variable speed drives,
- Compliance with South African grid codes and utility protection philosophies,
- Long-term reliability over lifecycles extending 15–20 years.

Rand Water has therefore issued this Request for Information (RFI) to obtain detailed technical, commercial, and operational input from the market on utility-grade Battery Energy Storage System solutions suitable for integration into its bulk water pumping infrastructure. The information received will be used to:

- Assess feasible BESS architectures and deployment strategies (centralised and/or distributed),
- Inform preliminary system sizing and configuration options,
- Identify risks, constraints, and enabling requirements,
- Support the development of a subsequent Request for Proposal (RFP) and business case.

This RFI is not a commitment to procure, but an information-gathering exercise designed to ensure that any future procurement is technically sound, commercially prudent, and aligned with Rand Water's mandate to deliver secure, sustainable, and cost-effective bulk water services.

4. OVERVIEW OF THE REQUIREMENTS

4.1 Scope of Envisaged Packages/Main Activities

4.1.1 Envisage Package 1 – BESS for Shifting Demand from Peak to Off Peak

Package 1 envisages the design, supply, integration, and commissioning of a grid-connected Battery Energy Storage System (BESS) configured primarily to shift electrical energy demand from Eskom peak tariff periods to standard and off-peak periods. The system shall operate in parallel with the existing electrical supply and pumping infrastructure and be optimised to reduce Rand Water's exposure to high Time-of-Use (TOU) electricity tariffs associated with bulk water pumping operations.

The BESS shall be engineered to discharge during defined peak tariff windows, partially offsetting grid import to the pumping loads, and to charge during off-peak and standard tariff periods without adversely impacting pump station operation, motor performance, or power quality. Under no circumstances shall pumping be interrupted or constrained due to battery charging, depletion of state-of-charge, or system transitions. Seamless, automatic operation and fail-safe reversion to full grid supply shall be inherent to the design.

This package shall include all associated power conversion equipment, medium-voltage integration, automation, energy management systems (EMS), protection, and balance-of-plant necessary to implement demand shifting in a safe, reliable, and fully compliant manner. The proposed solution shall be scalable and configurable to accommodate varying station demand profiles and shall be capable of supporting long-term operation under Rand Water's continuous pumping duty cycle.

Important Note: Ideally Rand Water would prefer that the OEM provide this system at their own capital cost, Rand Water would provide land, off-take and the saving made from shifting load from peak to off-peak be shared.

4.1.2 Envisaged Package 2: BESS Providing Temporary Backup for Power Failures

Package 2 envisages the design, supply, integration, and commissioning of a Battery Energy Storage System (BESS) configured to provide temporary electrical

backup during grid power supply interruptions, including unplanned outages, network disturbances, and short-duration voltage or frequency events affecting Eskom or municipal supplies.

The primary function of this BESS package is to maintain uninterrupted pumping operations for a defined autonomies period following a loss or degradation of grid supply, until normal supply is restored or auxiliary generation systems (where applicable) are fully available. The BESS shall operate in an online, parallel-connected configuration, capable of instantaneous response to supply failure without inducing pump trips, motor protection activation, or hydraulic transients.

The system shall include high-speed detection, automatic islanding and re-synchronisation capability, and seamless transition back to grid-connected operation once stable supply is restored. The BESS shall be compatible with large synchronous and induction motors, variable speed drives (VSDs), and existing station protection schemes. Under normal conditions, the system shall remain in a standby or partial-charge state to ensure immediate availability for backup duty.

This package shall include all associated power conversion systems, medium-voltage protection, control and automation, Energy Management System (EMS) logic, safety systems, and balance-of-plant required to provide a reliable and compliant temporary backup solution. The design shall consider defined backup durations, priority load selection, black-out ride-through requirements, and integration with any existing standby generation, while meeting applicable grid codes, safety standards, and Rand Water operational requirements.

4.2 Current Electrical Load Profile (Baseline Data)

Respondents shall base their proposed technical solutions, system architectures, and preliminary sizing assumptions on the measured average electrical demand profile across Rand Water's pumping stations, expressed as Average Megawatts (MW) per month. This demand profile represents the current baseline electrical loading associated with continuous bulk water pumping operations and is provided to support realistic modelling of Battery Energy Storage System (BESS) demand-shifting and backup-operational scenarios.

The demand profile includes pumping stations supplied directly by Eskom, as well as stations supplied via municipal or alternative electricity distributors, as summarised below.

Eskom-Supplied Stations

Station	Average MW/month
Zuikerbosch	97.62 MW
Lethabo	9.89 MW
Zwartkopjes	27.25 MW
Palmiet	46.13 MW
BWD Pumping	9.59 MW
Total Eskom Supply	**190.48 MW**

Non-Eskom (Municipal) Supply

Station	Average MW/month
Vereeniging – Emfuleni	26.89 MW
Eikenhof – City Power	35.90 MW
Mapleton – Ekurhuleni	13.05 MW
BWD Pumping – Emfuleni	1.87 MW
BWD Pumping – City Power	1.92 MW
BWD Pumping – Metsimaholo	1.28 MW
Total Other Supply	**80.92 MW**

The Grand Total Average Demand: 271.39 MW. These values provide an indicative representation of Rand Water's continuous electrical demand associated with bulk water pumping operations and shall be used by respondents as the reference load profile for evaluating BESS capacity, dispatch strategies, and system integration requirements. Proposals may address station-specific, regional, or portfolio-wide BESS deployment approaches, provided that the above demand data is clearly referenced and applied.

Important Note: The above electrical demand figures represent average monthly consumption values and do not explicitly reflect instantaneous peak demand, transient loading, or motor starting characteristics. Respondents are therefore required to clearly state,

justify, and document all assumptions used in their modelling and design, particularly with respect to:

- Peak-to-average load ratios
- Coincidence of electrical demand with Eskom Time-of-Use peak tariff windows
- Station simultaneity, operational diversity, and load aggregation factors

All such assumptions shall be explicitly identified in the RFI response and supported by sound engineering rationale and applicable reference experience.

4.3 System Objective & Operational Philosophy

The primary objective of this initiative is the design and supply of a Battery Energy Storage System (BESS) capable of partially or fully offsetting grid electricity consumption during Time-of-Use peak tariff periods, while enabling effective load shifting to standard and off-peak tariff periods. The BESS shall be engineered to optimise Rand Water's energy cost profile associated with bulk water pumping operations, without negatively affecting operational performance, water delivery obligations, or system reliability.

A mandatory operational constraint of the proposed system is that pumping operations shall at no point be stopped, interrupted, or compromised because of battery charging activities, full depletion of battery state-of-charge (including at 0% SOC), or any outage, fault, or unavailability of the battery system. The BESS shall therefore be designed as a parallel-operating system, interfacing continuously with the electrical grid and any other available power sources, and shall incorporate fully automatic and seamless transfer of electrical supply between sources.

The overall system architecture shall eliminate single points of failure and ensure that no individual component failure, control transition, or protection event results in pump tripping, inadvertent motor protection activation, or loss of hydraulic output. Continuous pumping capability and stability of the water supply system shall take absolute precedence over all energy management functions.

4.4 Bess Scope Of Supply

Respondents shall propose a fully engineered, utility-grade Battery Energy Storage System (BESS) solution comprising all equipment, systems, and services required for

safe, reliable, and continuous operation within Rand Water's bulk water pumping environment. The proposed solution shall be designed as an integrated system rather than discrete components and shall be suitable for long-term operation under continuous duty conditions typical of high-capacity pumping stations.

The Battery Energy Storage System shall consist of modular battery racks, containers, or purpose-built buildings, arranged to allow scalability, redundancy, and maintainability. Respondents shall propose appropriate battery chemistry options, which may include lithium iron phosphate (LFP), nickel manganese cobalt (NMC), sodium-ion, flow batteries, or equivalent proven technologies, together with clear justification for suitability in terms of safety, lifecycle performance, and operating conditions. The battery system shall include all necessary DC protection, isolation, monitoring equipment, and a fully functional Battery Management System (BMS) to ensure safe operation, fault detection, and effective life-cycle management.

The scope shall further include complete power conversion and electrical integration, comprising grid-tied power conversion systems (PCS/inverters) suitably rated for the intended duty, medium-voltage (MV) transformers, and MV switchgear with associated protection systems. All cabling, busbars, earthing, and lightning protection systems required for full integration shall be included. The BESS shall be synchronised with existing MV busbars in a manner that ensures stable, parallel operation with the grid and other power sources, while maintaining compliance with applicable grid codes and protection philosophies.

An integrated automation, control, and energy management architecture shall be provided. This shall include a robust Energy Management System (EMS) capable of Time-of-Use (TOU)-based scheduling, peak shaving and load shifting, state-of-charge management, and fail-safe and fallback logic to ensure continuous pumping under all operating conditions. The system shall incorporate appropriate PLC and/or RTU platforms, full SCADA integration with Rand Water's existing control systems, and facilities for secure remote monitoring and diagnostics.

The proposed solution shall also include all necessary balance-of-plant components, including HVAC systems suitable for battery and power electronics environments, fire detection and suppression systems compatible with the selected battery chemistry,

and all related civil works, foundations, structural enclosures, and access infrastructure. Comprehensive access control, safety, and occupational health systems shall be incorporated to ensure safe operation, maintenance, and compliance with statutory and Rand Water safety requirements.

4.5 Performance & Sizing Requirements

Respondents shall propose Battery Energy Storage System (BESS) sizing and configuration solutions based on Rand Water's aggregate electrical demand of 271.39 MW across all the stations, and/or on station-specific or regional deployment options, such as a Zuikerbosch-focused installation or clustered regional pump station solutions. Proposals may address centralised, distributed, or hybrid deployment strategies, provided that the approach is clearly defined and justified in relation to demand profiles, operational constraints, and economic performance.

Each proposal shall clearly specify the rated power capacity (MW/MVA) of the BESS, the usable energy capacity (MWh), and the intended duration of discharge during peak tariff windows. Respondents shall further indicate the percentage of the total station load or aggregate system load that the BESS is designed to supply during Eskom peak periods. All sizing assumptions, diversity factors, and load allocation methodologies shall be explicitly stated and supported by sound engineering principles.

Respondents are encouraged to submit multiple configuration options to enable comparative evaluation. These may include, but are not limited to, a cost-optimised option focused on partial peak shaving, a performance-optimised option targeting deep peak avoidance and maximum tariff offset, and alternative architectures comparing distributed versus centralised BESS deployment across the Rand Water network. Each option shall include a brief description of its operational philosophy, benefits, and limitations.

For the purposes of modelling and system design, respondents shall assume Eskom Time-of-Use tariff structures that include distinct morning and evening peak periods. The BESS shall be configured to discharge during these peak tariff windows and to

recharge during standard and off-peak periods, in a manner that optimises energy cost savings while preserving battery life and system availability. All proposed operating strategies shall respect existing grid import limits, station electrical constraints, and pumping operational requirements, and shall ensure continuous, uninterrupted pumping at all times.

4.6 Reliability, Redundancy & Availability

The proposed Battery Energy Storage System (BESS) shall be designed to achieve a minimum subsystem availability of not less than 98% on an annualised basis, excluding scheduled maintenance. The system architecture shall prioritise operational stability and shall ensure that transitions between operating modes, including charging, discharging, standby, grid disturbances, or system faults, do not result in nuisance tripping of pumps, motors, or variable speed drives (VSDs). All operating transitions shall be seamless and fully coordinated with existing protection and control systems.

Where technically and economically justified, the design shall incorporate N+1 redundancy for critical components such as inverters, control systems, auxiliary power supplies, cooling systems, and communications infrastructure. Respondents shall clearly define the Mean Time to Repair (MTTR) for major system components and describe maintenance strategies, spare-parts philosophy, and service response capabilities necessary to restore full system functionality within acceptable timeframes.

4.7 Power Quality & Grid Compliance

The BESS and all associated electrical equipment shall fully comply with the South African Grid Code, Eskom interconnection requirements, and applicable NRS standards, as well as any relevant municipal network codes where applicable. The system shall be designed to operate within prescribed power quality limits, including harmonic distortion limits in accordance with IEEE 519, applicable IEC 61000 series standards, or approved local equivalents.

The BESS shall be capable of providing reactive power support and voltage regulation at the point of connection to assist with network stability and power quality management. Anti-islanding protection shall be incorporated in accordance with utility

requirements, and the system shall demonstrate appropriate dynamic voltage and frequency ride-through capability to prevent undesirable disconnections during grid disturbances or transient e

vents.

4.8 Safety, Environmental & Cyber Security

The proposed solution shall be designed and implemented in accordance with internationally recognised battery safety standards, including IEC 62619, IEC 62933, and, where applicable, evidence derived from UL 9540A testing or equivalent fire-propagation assessments. Fire detection and suppression systems shall be specifically designed to suit the selected battery chemistry and enclosure configuration, with due consideration given to thermal runaway prevention, containment, and safe access for emergency response.

All work shall comply with the requirements of the Occupational Health and Safety Act and all applicable environmental legislation, standards, and Rand Water safety procedures. In addition, the BESS control, communication, and monitoring systems shall incorporate appropriate cybersecurity measures aligned with IEC 62443 principles, including secure access control, system hardening, network segmentation, monitoring, and audit functionality to protect against unauthorised access and cyber threats.

4.9 INFORMATION REQUIRED FROM RESPONDENTS

4.9.1 Technical Submissions

Respondents shall submit comprehensive technical information describing the proposed system solution. This shall include system architectures, single-line diagrams, and detailed descriptions of the Energy Management System (EMS) control philosophy, including Time-of-Use (TOU) optimisation logic. Performance modelling shall be provided using the 271.39 MW aggregate Rand Water electrical demand baseline, together with supporting assumptions relating to load distribution, diversity, and duty cycles. Respondents shall also provide battery degradation, efficiency, and lifecycle modelling, as well as a description of the intended approach to protection coordination studies and grid impact assessments.

4.9.2 Commercial (ROM)

Respondents shall provide indicative, non-binding Commercial information in the form of Rough Order of Magnitude (ROM) estimates. This shall include preliminary capital cost estimates, expected operations and maintenance costs, and projected lifecycle costs. Indicative delivery, installation, and commissioning timelines shall be stated, together with details of available warranty terms, performance guarantees, and long-term service and support offerings.

4.9.3 Experience & References

Respondents shall demonstrate relevant experience by providing details of at least three (3) comparable utility-scale BESS installations, preferably involving high-power industrial or critical-infrastructure applications. Information on local presence, technical support capabilities, and the ability to provide ongoing operational and maintenance support within South Africa shall be included.

4.10 Key Emphasis for RFI Responses

In submitting RFI responses, respondents shall explicitly demonstrate how the proposed BESS solution reduces Rand Water's exposure to Eskom peak tariff charges while ensuring that continuous pumping operations are preserved under all conditions. Proposals shall further describe how the solution can be scaled, replicated, or phased across Rand Water's pump station portfolio, and how technical, safety, and commercial risks are managed over the system lifecycle. Respondents shall clearly indicate how the proposed solution remains compliant, safe, and economically viable over an anticipated operating life of 15 to 20 years.

Rand Water further records that this RFI is not intended to restrict, limit or pre-determine competition in any future procurement process. Information obtained through this RFI will be used solely to inform internal planning, strategy development, governance decision-making and the design of potential future procurement processes.

Any future concession, energy trading, wheeling, asset development or asset transfer arrangement will be subject to detailed feasibility assessments, value-for-money analysis, legal and regulatory due diligence, and approval by Rand Water.

Respondents are advised that any future implementation involving electricity generation, energy storage, demand-side management, trading, wheeling or grid-connected services may require approvals, registrations or licences from the National Energy Regulator of South Africa (NERSA), Eskom, municipal distributors and/or other regulatory authorities.

Rand Water makes no representation regarding the availability, timing or certainty of such approvals. Any future procurement or implementation will be conditional upon the successful attainment of all required regulatory consents.

5. PROFESSIONAL REQUIREMENTS INDEMNITY

Respondents must confirm that they maintain in-force, claims-made Professional Indemnity (PI) insurance appropriate to energy trading/advisory services, with adequate limits, suitable territorial/jurisdictional scope, no exclusions for core trading advisory/settlement support, an unlimited or appropriate retroactive date, and a minimum 24-month run-off after expiry. A broker/insurer letter confirming current cover, limits, retro date, main exclusions and deductible(s), together with a 5-year loss history declaration, should accompany RFI submissions. Final requirements will be confirmed at RFP/award stage and may include additional insurances (e.g., Public Liability, Cyber).

Rand Water reserves the right to verify the validity, scope and adequacy of all insurance cover submitted and to require additional insurance cover at a later stage, should a formal procurement process be initiated.

6. MINIMUM SUBMISSION REQUIREMENTS

In addition to the above the expert consultant is required to provide RAND WATER with the following:

- Respondents are requested to submit a comprehensive written response to this Request for Information, addressing all sections and information requirements outlined in the RFI.

- The response should be supported by relevant capability statements that demonstrate the respondent's experience, technical competence and organisational capacity to provide energy trading services of a nature and scale relevant to Rand Water.

- Respondents are encouraged to include illustrative non-confidential case studies that highlight prior experience, operational approaches or outcomes achieved for comparable clients, provided that such case studies do not disclose commercially sensitive or client-identifying information.

- In addition, respondents should complete and submit any compliance checklists or questionnaires included as part of the RFI documentation, to facilitate a consistent and efficient assessment of responses.

- Respondents must submit a signed declaration confirming the absence of any actual, potential or perceived conflicts of interest in relation to this RFI or any potential future engagement with Rand Water.

7. COST OF REQUEST FOR INFORMATION

Respondents are expected to fully acquaint themselves with the conditions, requirements, and specifications of this RFI before submitting responses. Each Respondent assumes all risks for resource commitment and expenses, direct or indirect, of RFI preparation and participation throughout the RFI process. RAND WATER is not responsible, directly, or indirectly, for any costs incurred by service providers.

8. TERMS AND CONDITIONS

Respondents shall sign a Non-Disclosure Agreement (NDA) with RAND WATER so that they can have access to additional information for this RFI.

RAND WATER reserves the right to.

- ✓ Verify any information contained in a response.
- ✓ Postpone, withdraw, amend, modify, or cancel the RFI process at any time, without prior notice and without liability to compensate or reimburse any person pursuant to such.

8.1 Submission of RFI Responses

- To facilitate the preparation of the RFI Response, Respondents may access the following website where the Document can be downloaded: https://www.randwater.co.za/availabletenders.php/.
- The RFI Response, must be submitted to RAND WATER before or on closing date and time at the following address: Tender Box (by the main entrance), 522 Impala Road, Glenvista by not later than the time and date of 16:30 on 26 February 2026.
- RFI Responses reaching RAND WATER later than the cut-off time and date specified above may, in the RAND WATER's sole discretion, be rejected without further consideration.
- RFI Responses may be submitted prior to the cut-off time and date specified above, however only complete RFI Responses will receive attention from the RAND WATER.
- All costs incurred by a Respondent in connection with this Document and the preparation of its RFI Responses shall be borne by the Respondent.
- Responses submitted by companies must be signed by a person or persons duly authorised thereto in a form of a resolution so passed by the appropriate governing structure or letter of Delegation by an authorised Official of such Company.

8.2 Language of the RFI Response

- The RFI Response and all documents forming part of it shall be in English.
- Any printed literature submitted with the RFI Response may be in another language so long as it is accompanied by an English translation (made by an accredited translator) of the entire document.
- All correspondence and any other documentation and oral communication exchanged between the Respondent and the organisation shall be in English.

8.3 Further Information

- RAND WATER reserves the right to seek additional information from the Respondent regarding its RFI Response, as it may, in its sole discretion, determine, whether such information has been requested under this Document or otherwise, and may require the Respondent to make oral presentations for clarification purposes or to present supplementary information, in respect of its RFI Response if so, required by the RAND WATER.

- The Respondent may, following the submission of a RFI Response, be requested to engage with RAND WATER. Any meetings are likely to take place at RAND WATER offices, which is at the following address: **522 Impala Road, Glenvista 2058, South Africa.**

8.4 Contact with the Supply Chain Office

- All queries and requests for clarification in respect of this Document must be addressed to the Supply Chain Office of Rand Water. E-mailed or oral requests and queries addressed to persons other than a Supply Chain Official, at the address, will not be entertained and will not receive a response. RAND WATER will endeavour, in good faith, to respond to all reasonable written queries and requests for clarification raised by the Respondent Rand Water will provide a final response on clarifications by no later than ***ten (10)*** calendar days before the closing date.
- The Respondent must give the name and contact details of the person whom it appoints to undertake all contact with the SCM Office in its RFI Response.
- After the submission of its RFI Response, the Respondent may only communicate with RAND WATER through such person and RAND WATER shall be entitled, at

its sole discretion, to disregard any communication from the Respondent, that does not come from such contact person, and that does not go directly to the Supply Chain Office.

8.5 Compliance, Ethics and Market Conduct

- Respondents warrant that their submissions are prepared independently and without collusion, consultation, coordination or agreement with any other respondent. Any conduct that may constitute collusive behaviour, anti-competitive practices or market manipulation may result in exclusion from future procurement processes and referral to the appropriate regulatory authorities.
- Respondents must comply with all applicable legislation, including the Protection of Personal Information Act (POPIA), and confirm that any information submitted has been lawfully obtained and may be shared with Rand Water for the purposes of this RFI.
- Respondents acknowledge that Rand Water is a responsible party under POPIA and confirm that any personal information submitted is limited to what is necessary for the purposes of this RFI, has been lawfully obtained, and may be processed, stored and retained by Rand Water in accordance with its information governance policies.

8.6 Competition Law and Fair Market Conduct

- Respondents must comply with the Competition Act, 1998 (as amended), and warrant that their participation in this RFI does not involve any form of collusion, bid-rigging, price-fixing, market allocation, or exchange of competitively sensitive information with any actual or potential competitor.
- Rand Water reserves the right to disqualify any respondent and to report any suspected anti-competitive conduct to the Competition Commission of South Africa.

8.7 Intellectual Property and Use of Information

- All intellectual property rights in pre-existing proprietary methodologies, technologies, software and designs submitted by respondents shall remain vested in the respondent.

- By submitting a response to this RFI, respondents grant Rand Water a royalty-free, irrevocable, non-exclusive right to use, reproduce and analyse the information contained in the submission for internal evaluation, planning, governance and procurement development purposes.
- Rand Water shall not be restricted from developing its own specifications or procuring similar solutions from third parties, provided that it does not unlawfully disclose confidential proprietary information.

ANNEXURE A: CHECKLIST

This checklist is provided for information-gathering purposes only and does not constitute evaluation criteria, minimum eligibility requirements or scoring mechanisms for any future procurement process.

A. GENERAL SUBMISSION INFORMATION

☐ Company name and legal entity

☐ Company registration number and country of registration

☐ Physical and postal address

☐ Primary contact person (name, designation, email, telephone)

☐ Local South African presence (office, partners, service capability)

☐ BBBEE status level (if applicable)

☐ Declaration of interest and conflict of interest statement

B. PROPOSED SOLUTION OVERVIEW

☐ Executive summary of proposed BESS solution

☐ Description of proposed system architecture (centralised, distributed, or hybrid)

☐ Stations or regions addressed (aggregate/system-wide or station-specific)

☐ Alignment with RFI Packages:

- ☐ Package 1 – Peak to Off-Peak Demand Shifting
- ☐ Package 2 – Temporary Backup During Power Failure

☐ Key assumptions and exclusions clearly stated

C. TECHNICAL COMPLIANCE & DESIGN

C1. Battery Energy Storage System

☐ Battery technology and chemistry proposed

☐ Battery configuration (racks, containers, buildings)

☐ Battery Management System (BMS) description

☐ DC protection, isolation, and monitoring approach

☐ Battery safety certifications (IEC 62619, IEC 62933, UL 9540A evidence)

C2. Power Conversion & Electrical Integration

☐ PCS/inverter ratings and configuration

☐ MV transformer specifications

☐ MV switchgear and protection philosophy

☐ Synchronisation approach with existing MV busbars

☐ Earthing, lightning protection, and cabling strategy

C3. Automation, Controls & EMS

☐ EMS control philosophy and operational modes

☐ TOU optimisation and scheduling logic

☐ Peak shaving and load shifting strategy

☐ SOC management and fail-safe logic

☐ PLC/RTU architecture

☐ SCADA integration approach (protocols and signals)

☐ Remote monitoring and diagnostics capability

D. BESS SIZING & PERFORMANCE

☐ BESS sizing based on the 271.39 MW baseline clearly demonstrated

☐ Rated power capacity (MW and/or MVA) stated

☐ Usable energy capacity (MWh) stated

☐ Duration of peak-period discharge defined

☐ Percentage of station/system load supplied during peak periods

☐ Multiple configuration options submitted (if applicable):

☐ Cost-optimised option

☐ Performance-optimised option

☐ Distributed vs centralised option

☐ Justification of peak-to-average assumptions

☐ Coincidence and diversity factors stated

E. RELIABILITY, AVAILABILITY & REDUNDANCY

☐ Availability target ≥98% stated

☐ Redundancy philosophy (N+1 or equivalent) defined

☐ No-trip, bumpless transition strategy described

☐ Mean Time to Repair (MTTR) defined

☐ Maintenance philosophy and spare-parts strategy

F. POWER QUALITY & GRID COMPLIANCE

☐ Compliance with South African Grid Code confirmed

☐ Compliance with Eskom and relevant municipal requirements confirmed

☐ Harmonic distortion compliance (IEEE 519 / IEC) demonstrated

☐ Reactive power and voltage support capability stated

☐ Anti-islanding protection described

☐ Voltage and frequency ride-through capability described

G. SAFETY, ENVIRONMENTAL & CYBER SECURITY

☐ Fire detection and suppression system design provided

☐ Environmental and thermal management strategy provided

☐ OHSA compliance confirmation

☐ Cybersecurity approach aligned with IEC 62443 principles

☐ Secure access, monitoring, and audit functionality

H. PERFORMANCE MODELLING & STUDIES

☐ Load and energy modelling provided

☐ TOU optimisation modelling results included

☐ Battery degradation and lifecycle performance modelling (15–20 years)

☐ Round-trip efficiency stated

☐ Grid impact and protection study approach outlined

I. COMMERCIAL INFORMATION (ROM)

☐ Capital cost estimate (ROM)

☐ Operations and maintenance cost estimate

☐ Lifecycle cost assumptions

☐ Delivery, installation, and commissioning timeline

☐ Warranty terms (equipment and performance)

☐ Long-term service and support offerings

J. EXPERIENCE & REFERENCES

☐ At least three (3) comparable utility-scale BESS references provided

☐ Reference project size, application, and year of commissioning stated

☐ Client contact details provided

☐ Local execution and support capability demonstrated

K. RISK & ASSUMPTIONS

☐ Key technical risks identified

☐ Mitigation strategies described

☐ Commercial and programme risks identified

☐ Clear listing of assumptions and exclusions

L. DECLARATION

☐ Confirmation that the submission is non-binding

☐ Acknowledgement that this is an RFI and not a commitment to procure

☐ Authorised signatory and date