



**REQUEST FOR INFORMATION (RFI): ELECTRICAL QUALITY OF SUPPLY (QOS) MONITORING DEVICES & FLEET MANAGEMENT SOFTWARE**

**TO ASSESS AVAILABLE QUALITY OF SUPPLY DEVICES AND FLEET MANAGEMENT SOFTWARE SOLUTIONS IN COMPLIANCE WITH NRS 048:2025 REGULATIONS FOR THE CITY OF CAPE TOWN ENERGY DIRECTORATE**

**1. Purpose**

- 1.1. This is a Request for Information (RFI) that relates to advanced Quality of Supply monitoring instrumentation and online fleet management ecosystem.
- 1.2. There is a need to expand and maintain our current fleet of Quality of Supply Instruments.
- 1.3. This research will inform an appropriate procurement strategy to be followed for the supply of such solutions.

**2. Background**

- 2.1. As a municipality and a local government entity, the City of Cape Town needs to comply with various policies and regulations, for example, Municipal Financial Management Act (MFMA), Preferential Procurement Policy Framework Act (PPPFA), Generally Accepted Municipal Accounting Practice (GAMAP), and municipal standard chart of accounts (MSCOA).
- 2.1. Power quality monitoring is a NERSA license condition. The City of Cape Town's Network and Service performance is measured in accordance with NRS 048 and reported annually to NERSA.

**3. Request for Information**

- 3.1. This Request for Information (RFI) is not a request for proposal, request for quotation, offer or invitation for bid, nor does its issuance restrict the City of Cape Town in its eventual implementation activities.
- 3.2. The responses to the Request for Information will provide the City of Cape Town with information about products currently available in the market to support its required business capabilities.
- 3.3. The City of Cape Town may request additional information from the respondents and may request demonstrations (proof of concepts) to be provided. It is therefore important that respondents provide accurate and honest information in their responses.
- 3.4. This Request for Information will be published with the aim of collecting information on multiple products and solutions offerings.

#### 4. Timeline

The City is currently requesting information on products already available in the market to meet the City of Cape Town needs.

- |                        |                        |
|------------------------|------------------------|
| 4.1. RFI Release date: | Monday, 18 May 2026    |
| 4.2. RFI Closing date: | Thursday, 18 June 2026 |

#### 5. Product and Solution Offering Information

Respondents are to provide structured information under the following two sections.

- **Section A: Mandatory Functional & Compliance Specification**

##### **Compliance Baseline**

Comply with NRS-048:2025 specifications, including:

- IEC 61000-4-30 Ed 3.0 Class-A – Power Quality Measurement Standard
- Recording voltage disturbances (dips, swells, interruptions)
- Measuring flicker, frequency, and unbalance
- Providing event logs and detailed reports

##### **Additional mandatory requirements**

- Internal storage for all NRS-048 parameter data
- Compliant sampling rate
- GPS clock for accurate time stamping of events

##### **Online Fleet Management Platform**

The solution must include a centralized software platform providing, at minimum:

- Fleet-wide data hosting and instrument management
- Real-time data visualization
- Automated NRS-048 compliant reporting and diagnostics
- Remote instrument setup, configuration, and firmware management
- Historical data retrieval and trend analysis

##### **System & Connectivity**

- High-precision time synchronization: GPS and/or IEEE 1588v2 (PTP)
- Communications with instruments via Ethernet port/ RS232 port
- Remote communications via internal cellular router (4G)
- Remote communications external GPRS modem
- Communications software compatible to latest Windows version

- **Section B: Desirable Additional Capabilities**

Respondents are invited to indicate whether their solution additionally provides any of the following capabilities, which align with the City's strategic objectives for enhanced grid visibility – including Program A.3.h of the City's Energy Strategy and the SANEDI Strategic National Smart Grid Vision (Version 2.0, 2023):

- **Fleet-wide synchronized event capture:** Ability to configure devices into virtual groups for time-synchronized waveform captures across multiple measurement points, enabling cascade and network propagation analysis.
- **Advanced power quality and grid stability measurement:** GPS-synchronized distribution-level phasor measurement compliant with IEEE C37.118.
- **Grid stability diagnostics:** Continuous monitoring of oscillatory behavior across the distribution network to support management of inverter-based resource (IBR) integration.
- **Multi-vendor data ingestion:** Ability to ingest power quality data from third-party instruments (e.g., via PQDiF format) for centralized fleet-wide analysis.

It is not necessary to provide detailed specifications for Section B capabilities at this stage. A brief indication of availability and maturity is sufficient.

## 6. General Company and Product Information

The responder who are in possession of a valid NRS-048:2025 compliance certificate for the hardware and have an established, commercially available software platform for fleet-wide QoS management are invited to submit:

- 6.1. Company Background: Provide details on your company's structure and mode of doing business in terms of manufacturing, supplying, operating and/or maintaining Quality of Supply instruments and Fleet management platform.
- 6.2. A clear scanned copy of the valid compliance certificate.
- 6.3. A device specification data sheet.
- 6.4. A system architecture overview demonstrating how the solution manages fleet-wide data hosting, diagnostics, and NRS-048 reporting.
- 6.5. A brief response to Section B capabilities (if applicable).

## 7. Product Offering References

The responder to provide information relating to the implementation of the product and where the product is successfully deployed:

- 7.1. Local Footprint: Provide details of where the proposed and recommended products have been implemented locally in South Africa.
- 7.2. International Footprint: Provide details of where the proposed and recommended products have been implemented internationally.

7.3. Public Sector and / or Government Footprint: Provide details of where the proposed and recommended products have been implemented in the public sector or government sector, either locally or internationally.

7.4. Contactable References: Provide updated contact details of at least two (2) contactable references, with the details of when the implementation was completed and the scale and type of project as well as the product version number:

7.4.1. Company name and details

7.4.2. Contact person name and surname

7.4.3. Role on the implementation

7.4.4. Telephone number

7.4.5. Email address

The City requires the ability to engage with reference clients from existing implementations of the solutions.

## 8. Product Pricing Structure

The responder to provide information relating to the pricing structure of the product and indicated pricing as per the below:

8.1. Supply pricing list for hardware equipment available.

8.2. Supply the pricing for the fleet management system.

8.3. Supply pricing on services available.

## 9. Interaction with Respondents

9.1. Respondents are advised that the City of Cape Town reserves the right not to utilise information gathered during the request for information process in order to complete a specification, which is to be put forth for tendering.

9.2. Send any questions to [nceba.mabulu@capetown.gov.za](mailto:nceba.mabulu@capetown.gov.za) should you have any queries.

## 10. Proof of Concept

10.1. The City of Cape Town reserves the right to engage respondents to look at different methods to validate and test information provided in response to this RFI. This may include a request for a proof of concept or a demo. This will not result in any financial contribution towards proofing the respondent(s) concepts but will allow the City of Cape Town to engage after the conclusion of this RFI with the aim to ensure the information provided is validated and tested.

## 11. No Obligation

11.1. This RFI places no obligation on the City of Cape Town to embark on any subsequent process to obtain any product or solution offering listed herein and respondents hereto shall obtain no preference or favour by responding to the Request for Information.

- 11.2. The City of Cape Town is bound by relevant legislation and formal procurement and other procedures and therefore will follow these procedures should a need arise to procure any technologies in the future.
- 11.3. Responses to this RFI are voluntary. Do not include any proprietary, classified, confidential, trade secret, or sensitive information in your response. The responses will be reviewed by City staff, and individual feedback will not be provided to any respondent. The City of Cape Town will use information submitted in response to this Request for Information at its discretion. The City of Cape Town reserves the right to use any submitted information on its public websites, in reports, in summaries, in any possible resultant solicitation(s), grant(s), or cooperative agreement(s), or in the future development regarding this subject.
- 11.4. This RFI is for information and planning purposes only and shall not be construed as a solicitation, grant, or cooperative agreement, or as an obligation on the part of the City of Cape Town. The City of Cape Town will not pay for the preparation of any information submitted or for the use of such information nor undertakes to protect what the respondents deems to be proprietary or intellectual property. No basis for claims against the City of Cape Town shall arise as a result of a response to this request for information or from the use of such information.
- 11.5. The research obtained from this RFI will inform the technical and functional specification of the proposed goods and services to be obtained, which may then follow an open competitive bidding process, should the City of Cape Town opt to implement such a system (Viability and Feasibility assessment, budgetary provisions, etc.). The City of Cape Town reserves the right not to proceed with any further process, should the research/technology indicate it is not a priority, viable and/or feasible. The City of Cape Town reserve the right to applied different procurement strategies, while exploring different methods to validate and test information provided in response to this RFI.

## 12. Submission Requirements

- 12.1. Please provide all inputs electronically on or before **16:00 on Thursday, 18 June 2026.**
- 12.2. All responses to be sent: [nceba.mabulu@capetown.gov.za](mailto:nceba.mabulu@capetown.gov.za)
- 12.3. Email subject line: RFI160/2025/26 response from [Insert company name]
- 12.4. Response format: PDF or MS Word
- 12.5. Length: +/-20 pages including support documentation.

Thank you

**Demand Management**

Directorate of Finance

Department of Supply Chain Management