January 29, 2025

Mr. Janio Leonardo Los
Operador Nacional do Sistema Elétrico
Rua Júlio do Carmo, 251 - Cidade Nova
20211-160 – Rio de Janeiro – RJ

RE: **Maintenance Support Services for Grid Protection Alliance, Inc., Products**

Dear Mr. Leonardo Los:

Per your request, this is a quote for Grid Protection Alliance, Inc., (GPA) to provide annual support services to Operador Nacional do Sistema Elétrico (ONS) for GPA synchrophasor applications in each of the two control centers as described below and reporting.

Coverage and Licensing

This agreement covers the following applications in each of two control centers:

- openPDC
- openHistorian
- Stream Splitter

GPA will grant a perpetual, non-exclusive, non-transferable license to use the latest version of the Enterprise Edition released during the term of this agreement **at no cost once released**. Support is provided for the deployment of new versions and patches during the term of this agreement; it is the sole responsibility of ONS to schedule deployments within this timeframe to receive such support. ONS's existing agreement covers these applications through June 3, 2025.

Operating Environment

This agreement is valid for two (2) operating environments, where an "operating environment" is defined as one or more instances monitoring the same data (e.g., Substation vs. Control Room, Transmission vs. Distribution, etc.), and an "instance" is defined as a separate installation (e.g., failover clusters; production, acceptance, and test; etc.). Should either operating environment need to be split for performance or any other reason, this agreement will cover only the **original installation environments** until a separate agreement is arranged.

The services to be provided by GPA are described in the attached Product Maintenance Sheet.

Pricing

One (1) year of 24-hour x 7-day support plus reporting is priced as follows:

Package/Application	Price (annual)
openPDC	$20,000 USD
openHistorian	$20,000 USD
Stream Splitter	$ 2,500 USD
Reporting	$ 2,000 USD

Given ONS and GPA's pre-existing relationship, GPA offers a $27,000 USD discount annually, bringing the total cost to:

openPDC EE x 2	$ 20,000 USD
openHistorian EE x 2	$ 20,000 USD
Stream Splitter EE x 2	$ 2,500 USD
Reporting	$ 2,000 USD
Total	$ 67,000 USD
Discount	-$27,000 USD
Total Annual	**$ 60,000 USD**
Total Contract	**$180,000 USD**

Payment for the first year is due within thirty (30) days of the contract signing or start date, and the second and third years are due within thirty (30) days following the contract anniversary date with an annual cost of $60,000 USD.

Time and Materials

GPA will provide time and materials support services to assist ONS in operating its synchrophasor data system including the addition of additional software features and assistance in configuration among other services to be performed at the discretion of ONS and ONS staff. ONS has requested up to 20 hours of work per month at previously established GPA labor rates.

Hourly	$ 180 USD
Monthly Total (20 hrs)	$ 3,600 USD
Annual Total (240 hrs)	$ 43,200 USD
3-Year Contract Total	$129,600 USD

All work to be performed or supervised by senior personnel. Terms of payment are net 30 days.

GPA has the technical experience and capability to quickly meet ONS's support needs for these products and to provide enhancements to them as your synchrophasor systems mature.

We look forward to this opportunity to provide support services to ONS. This offer is valid until May 31, 2025. If you have any additional questions, please do not hesitate to get in touch with me at (570) 637-7161 or clackner@GridProtectionAlliance.org.

Quote Authorization: _____   Date: ___January 29, 2025___

Dr. Christoph Lackner, Operating Officer and Lead Engineer
Grid Solutions | Grid Protection Alliance, Inc.

Please sign, date, and return this quote to accept.

Quote Acceptance: _____   Date: _____

Grid Protection Alliance, Inc.
Annual Product Maintenance

Annual Grid Protection Alliance, Inc., (GPA) Product Maintenance

With an annual product maintenance agreement, GPA agrees to:

- Provide support for all instances of the products specified in the associated quote including test, acceptance, and production.

- Provide notice of significant bug fixes and new product releases.

- Provide support for the application of patches or the migration to new versions of the product.

- Make GPA staff available for consultation and problem resolution.

- Provide access to a private, problem-reporting web site (separate from GPA's public, open-source problem reporting) to open maintenance tasks and allow tracking of these tasks to completion.

- Establish a process to escalate problem resolution, should it be necessary.

- Grant the maintenance contract owner a priority voice in establishing a ranking list for new features to be included in subsequent product releases.

- Provide the maintenance contract owner with two free registrations to the annual GPA User's Forum, during the term of the maintenance agreement.

Business Day Support (10 hours x 5 days)

- GPA personnel will be available for e-mail and telephone support during normal GPA business hours which are Monday through Friday, 8:00 a.m. until 6:00 p.m., eastern time, with the exclusion of six holidays -- New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving, and Christmas.

- During GPA business hours, GPA on-call staff will respond immediately, whenever possible; but, in any event, GPA staff will reply within 30 minutes by telephone call or e-mail to acknowledge receipt of a support request and initiation of work on the issue.

- A 24-hours x 7-days support telephone number will be provided for hours outside of those covered by the 10-hours x 5-days maintenance services. GPA will endeavor to provide this after-business-hours support (subject to the availability of GPA personnel) at 150 percent of GPA's standard consulting rates with a 4-hour minimum charge.

Round-the-Clock Support (24 hours x 7 days)

- Includes all GPA Business Day Support services.

- Additionally, GPA personnel will be available 24 hours x 7 days x 365 days via a direct mobile number and will respond within 15 minutes. Problem investigation will begin immediately.