



Arizona Public Service Company (APS) Event Data Retrieval RFP Request for Proposal (RFP) Respondent Instructions Supplier Questionnaire

This Request for Proposal (RFP) contains proprietary and confidential information that shall not be used, disclosed, or duplicated—in whole or in part—for any purpose other than to evaluate and/or respond to this RFP. The recipient of this document agrees to—limit the disclosure to those who have a need to know the confidential information contained in this document for purposes of this RFP, and who are bound in writing by confidentiality terms, policies or procedures no less restrictive.

Instructions

The following section represents the Supplier qualitative response portion of the RFI. Please answer all questions in this document and attach it as part of your bid proposal. You may respond below to each question, or as an additional document as part of your submission

1. Company Overview

- 1.1. Please provide a brief company overview, including number of employees, and how long the company has been in business.

GPA is a not-for-profit organization specializing in open source software for the electric utility industry. We were founded in 2010 and our clients include large Transmission Operators, Reliability Coordinators and Distribution Utilities in the U.S. and abroad. We focus on Power Quality Data management and automated retrieval and analysis of event and interval data to enable our clients to focus on the relevant data quickly while leaving standard data retrieval and analysis to automated systems. We are located in Chattanooga TN and currently have 14 employees including support personal, software engineers and electric power experts.

- 1.2. Please provide your company's contact information:

Company	
Company name	Grid Protection Alliance, Inc.
Address	1100 Market St Ste 806, Chattanooga, TN 37402
Phone number	+1 (423) 702 8136
Company Federal Tax ID number (EIN)	27-1506380
DUNS number	833117554
Year Founded	2010
Website address	https://www.gridprotectionalliance.org
Primary Contact for RFI Response	
Name	Erika Wills
Title	Manager Support and Customer Success
E-mail address	Elwills@GridProtectionAlliance.org
Phone number	+1 423 287 5856
Technical Contact for RFI Response	
Name	Christoph Lackner
Title	Operating Officer
E-mail address	CLackner@GridProtectionAlliance.org
Phone number	+1 423 206 9983

- 1.3. Identify your company's main services.

Software development and consulting services for the electric utility industry with a focus on automated Power Quality Data retrieval and analysis.

- 1.4. Describe your experience and ability to provide the services as outlined in this RFI

GPA has developed several application in the space of power quality data management reaching from data retrieval through data analysis, storage and notification to visualization for engineers, customers and management. Several Utilities are using GPA tools as their primary applications for managing Power Quality Data and GPA routinely consults existing and new clients in setting up and improving their automated PQ data management systems.

- 1.5. Describe any significant alliances your firm has struck with other companies that may be relevant to this RFI. Describe how they create a compelling solution for APS.

GPA closely works with the Electric Power Research Institute (EPRI) on developing new features based on EPRI's R&D programs and EPRI's offerings to its member utilities.

- 1.6. Is your company currently involved in any outstanding litigation, class action suits, or other legal liabilities that may impact your proposed solution or impact the reputation of APS through association? If yes, please describe in detail.

No.

- 1.7. Does your organization provide reporting to support direct and indirect purchases from Woman and Minority Owned Businesses? If yes, please provide a sample of your organization's report for review.

N/A

2. Company Financials

- 2.1. Provide your total annual revenues by industry sector for 2022 and forecast for 2023 and 2024.

All of GPAs Revenue comes from the electric utility sector.

2022 Revenue (mi \$) 1.2

2023 Revenue (mi \$) 1.3

Estimated 2024 Revenue (mi \$) 1.4

- 2.2. Please summarize your main growth drivers.

GPAs main growth drivers are the growing deployment of power quality monitoring devices and the associated workload this puts on utilities engineers.

- 2.3. What percentage of your 2022 revenue was accounted for by your top 5 customers?

	Customer 1	Customer 2	Customer 3	Customer 4	Customer 5
% of 2022 revenue	35	7	6	6	4

3. Competitive Landscape

- 3.1. When compared with other capable suppliers, describe your company's key competitive advantage and or one unique sales proposition.

GPAs software is primarily open source, this allows GPA to offer it's clients significant advantages over traditional vendors including:

- No Vendor Lock in – GPA data retrieval software offers countless standard protocols enabling it to connect to a wide variety of Field Devices from various vendors
- Risk Reduction – GPA software is primarily licensed under the open MIT Licenses, meaning APS has full flexibility in terms of making changes or hiring 3rd party vendors to make changes or take ownership of the applications.
- GPA Skills and Abilities – GPA had a proven capability to deliver high-availability, production-grade solutions for multiple utility clients in this area.

- 3.2. Please advise your market position and approximate share of the Arizona market.

GPA currently does not have any clients in the Arizona market. However, since GPA applications are open source there may be a number of users of GPA software located in Arizona. GPA is aware of at least 2 R&D institutions using GPA products within Arizona.

Nationally GPA has an approximate market share of 50% in the Synchrophasor data retrieval space. Statistics on market share for GPA power quality products is currently not publicly available.

4. Customer References

- 4.1. Please give an example of a client relationship that did not work out. Provide a description of the services provided. Describe the main reasons for failure and how the situation was managed.

In 2021 a well known US Utility has decided to no longer continue their maintenance agreement with GPA for some of their production synchrophasor systems. These systems are based on GPA products and their setup and installation was supported by GPA.

Following this decision the client decided to move forward with a 3rd party vendor to take over maintenance and continued configuration of the GPA tools. Since GPA tools are licensed under the MIT licenses, the client can continue to use the software and tools at no cost.

Since then, the 3rd party Vendor has reached out to GPA on numerous occasions requesting GPA to provide consulting services in support of their maintenance activities with the utility.

While GPA does not recommend this approach, GPA continues to assist the 3rd party vendor and the utility based on hourly consulting contracts.

Please identify if you currently or have in the past worked with companies similar to APS. If yes, please describe the scope, nature, and length of the arrangements with each of these companies.

GPA has worked with 2 TN distribution utilities in setting up their Power Quality Data collection and analysis tool. Both utilities had an initial engagement of 6-8 months to get their system set up and configured.

At one utility GPAs applications are analyzing data from approximately 1400 devices recording Power Quality and Point on Wave Data. At the other utility GPA is retrieving and analyzing data from approximately 300 Power Quality Meters.

GPA is providing on-going support services for both clients based on annual maintenance contracts. In addition, both clients are regular attendees at GPAs user-group meetings and have encouraged development of additional features in GPAs products that continue to be useful for them.

- 4.2. Please provide details on two completed projects which were similar to the scope, schedule, and technical requirements of this RFQ, acknowledging that some project details may be subject to contractual non-disclosure agreements.

Project #1

Customer Contact	
Company name	Tennessee Valley Authority
Contact name	Anthony Murphy
Contact title	Power Quality Engineer for Transmission
Address	1101 Market Street, Chattanooga, TN 37402
Phone number	+1 423 309 8390
E-mail address	Ammurphy@tva.gov
Contract Information	
Brief company description	The Tennessee Valley Authority provides electricity for 153 local power companies serving 10 million people in Tennessee and parts of six surrounding states, as well as directly to 58 large industrial customers and federal installations.
Effective date	June 14 2019
Contract term	Dec 31 2023

Contract extension (Y/N)	Y
\$ size of contract	\$735,000.00
Termination Date	N/A
Reason for Termination	N/A
Description of Project services, including: . Roles & Responsibilities . Delivery methodology Project outcome Improvements Implemented at the Client	The purpose of this project is to improve automation and reduce operational costs as the scope of TVA PQ infrastructure continues to expand. Implementation of the solution will simplify and consolidate legacy department applications and result in an integrated collection of applications that are no longer fragmented and which will be able to be more easily maintained. The primary TVA application to be retired as a result of this proposal is PQMS, a web-based application developed on an ad-hoc basis to meet address configuration, meter status, and reporting requirements. In addition, five applications internally developed by TVA will be retired. These are the configuration checker, service monitor, latency tracker, download issues email and the lightning statistics email. In addition to retiring these applications, TVA desires new functionality that can be enabled through new analytics or as can be implemented as PQ systems are integrated. This functionality will be integrated into GPAs existing openXDA suite of PQ tools.

Project #2

Customer Contact	
Company name	Electric Power Research Institute, Inc.
Contact name	Tom Cooke
Contact title	Principal Technical Leader
Address	942 Corridor Park Blvd., Knoxville, TN 37932
Phone number	+1 865 218 8010
E-mail address	tcooke@epri.com
Contract Information	
Brief company description	EPRI is an independent non-profit energy research, development, and deployment organization, with three specialized labs.
Effective date	August 24 2020
Contract term	December 31 2021
Contract extension (Y/N)	Y
\$ size of contract	\$202,000
Termination Date	N/A
Reason for Termination	N/A

<p>Description of Project services, including:</p> <ul style="list-style-type: none">. Roles & Responsibilities. Delivery methodology <p>Project outcome</p> <p>Improvements Implemented at the Client</p>	<p>The objective of this project was to define the analytics required for trending data to support power quality and disturbance analysis business processes at electric utilities and then to implement these analytics in an open-source trending-data analytics platform to be called TrendAP. For both performance, ease of management of metadata and the requirement for integration with other GPA tools such as the openSEE waveform display tool, TrendAP will require use of the data layer for PQ periodic data that is part of the openXDA/Open PQ Dashboard suite of products. This data layer will be non-proprietary and fully open with emphasis on ease of integration with other corporate information systems. Currently, this data layer is provided by GPA's openHistorian. Other more generally implemented data layer technologies are being investigated by GPA as a preferred solution from both technical and business perspectives.</p>
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