



GRID  
PROTECTION  
ALLIANCE

User's Group

openXDA PQDashboard openSEE  
openMIC. TrenDAP miMD  
POWER QUALITY Digest SE Browser System Center

*open***XDA**  
eXtensible Disturbance Analytics



# GPA Introduction

# Agenda

1:00 – 1:15 EPRI Introduction (Tom Cooke, EPRI)

**1:15 – 1:25 GPA Updates (Dr. Christoph Lackner, GPA)**

1:25 – 1:55 Capacitor Bank Health Analytics (Tony Murphy, TVA; Dr. Surya Santoso, UT Austin; Dr. Gaurav Singh, EPRI)

1:55 – 2:40 Learning from Power Signals (Dr. Don Reising UTC)

2:40 – 2:55 Break

2:55 – 4:15 PQ Displays and PQ Health Index (Russell Robertson, GPA; Jonathan Sides & Tony Murphy, TVA)

4:15 – 5:00 Discussion

# Introduction Key GPA Staff



Grid Protection Alliance, Inc., specializes in the development and support of **innovative software solutions** for the **electric industry**.

GPA has a track record of innovation and **has led major software development projects** with client utilities and the Federal Government.

In addition to **custom application development**, GPA offers services for installation, set-up, integration, and on-going **maintenance of its open-source software**.



**Dr. Christoph Lackner**  
Operating Officer & Lead Engineer

**ROLE: Operational & Engineering Leadership**

- Establishes new software development projects and assures the successful completion of established projects.
- Provides engineering oversight of GPA analytic applications.
- 8+ years' experience with synchrophasor data analytics and use of synchrophasor data in various applications such as state estimation, predictive maintenance, and system parameter estimation.
- Specializes in the development of real-time and offline data analytics for power systems.



**Erika Wills**  
Support Engineer

**ROLE: Support & Project Leadership**

- Recently joined GPA
- Previous experience in sales, operations and technical support
- 10+ years of experience in customer support and project management.
- B.S. in IT with focus on software development.



**Stephen Wills**  
Senior Systems Analyst

**ROLE: Lead Software Development**

- Major contributor to GPA software solutions and provides system support and integration services to utilities.
- 10 years' experience in developing .NET solutions, much of that time contributing significantly to GPA's core code base – the Grid Solutions Framework.
- Specializes in the management of data from substation devices – PMUs, DFRs, power quality meters, and relays.
- Prior to joining GPA, extensive experience at the Tennessee Valley Authority in development of synchrophasor data software.



**Ritchie Carroll**  
Senior Solutions Architect

**ROLE: Systems Architect & Lead Developer**

- Oversees GPA software development and provides software system design and development services to utilities.
- 25+ years' expertise in high-performance software system design, development, and delivery. Has led numerous large software development projects.
- 10 years at the Tennessee Valley Authority leading synchrophasor software development among other operational systems.
- Active participant in NASPI and other industry efforts to improve synchrophasor data systems.



**Russell Robertson**  
Principal

**ROLE: Strategic Studies**

- Establishes collaborations within the utility industry to support the development and maintenance of open-source software.
- Founded GPA's open-source software and consulting-service business.
- Expertise in grid operations, IT/OT architecture, information management, and control systems.

# Support and Deployment Changes

- We are moving towards migrating everyone over to the new support portal by Q2 2023
- Moving towards simplifying deployments
  - Containerization
  - Installer simplification
  - Feature adjustments

# Coming Up

- OpenXDA 3.0 Release – Expected late Jan 2023
- TrenDAP Phase II
- PQDigest Launch
- PQ analytics as a Service
  - On-cloud solutions for transmission and distribution utilities
  - Connectivity to Eaton EMCB residential breakers

# Future UsersGroup Meetings

- Q1 2023 – February 27th following EPRI Winter Advisory Meeting
  - Virtual UsersGroup meeting
  - Focus on utility updates
- Q2 2023 – June/July
  - In-person Users Group and Tutorial
  - Proposed PQDigest Tutorial
- Q3 2023 – September
  - Hybrid UsersGroup meeting
  - Focus on utility issues / moving towards openXDA 3.1
- Q4 2023 - December
  - Virtual meeting
  - Focus TBD