Open PQ Dashboard Users Group Meeting TVA Update

April 21, 2022

TVA · TENNESSEE VALLEY AUTHORITY

Agenda

OpenMIC

PQDigest

TrenDAP

System Event Browser

Email Subscriptions

TVA TENNESSEE VALLEY AUTHORITY

OpenMIC - Device Data Handlers

- Added additional support to OpenMIC for polling event and trending data, diagnostic files, and configuration files.

- SEL-735 Trending data (load profile reports)

- Schneider ION meters via vendor protocol

- Dranetz 61000 meters via vendor protocol

OpenMIC - Real Time Displays

- OpenMIC shows real time displays for Dranetz 61000 meters

- Schneider ION, SEL-735, PSL PQube, & APP DFR RT displays are currently being developed

- Support commissioning of devices and DER resources
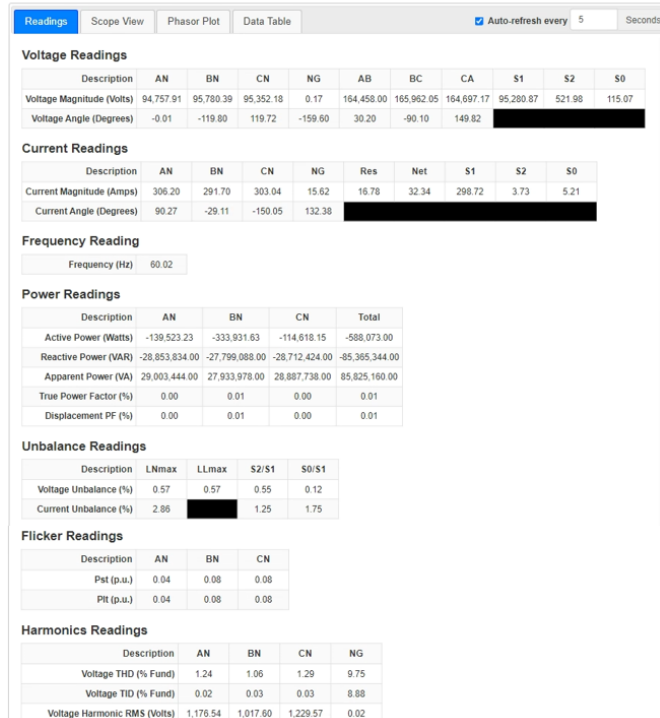
OpenMIC - Device Configuration

- Configuration pages added for Dranetz 61000 meters

- Configuration pages for PSL PQube meters currently in development

- Allows Device configuration management in single place

- Better configuration control

PQDigest – Home Screen

- Intended for Customers

- Top Level View

- Mag / Dur Curve of Last 30 Days of Events

- Bar Chart by Event Type in Last Year

- Table of Most Active Meters in Last 30 Days
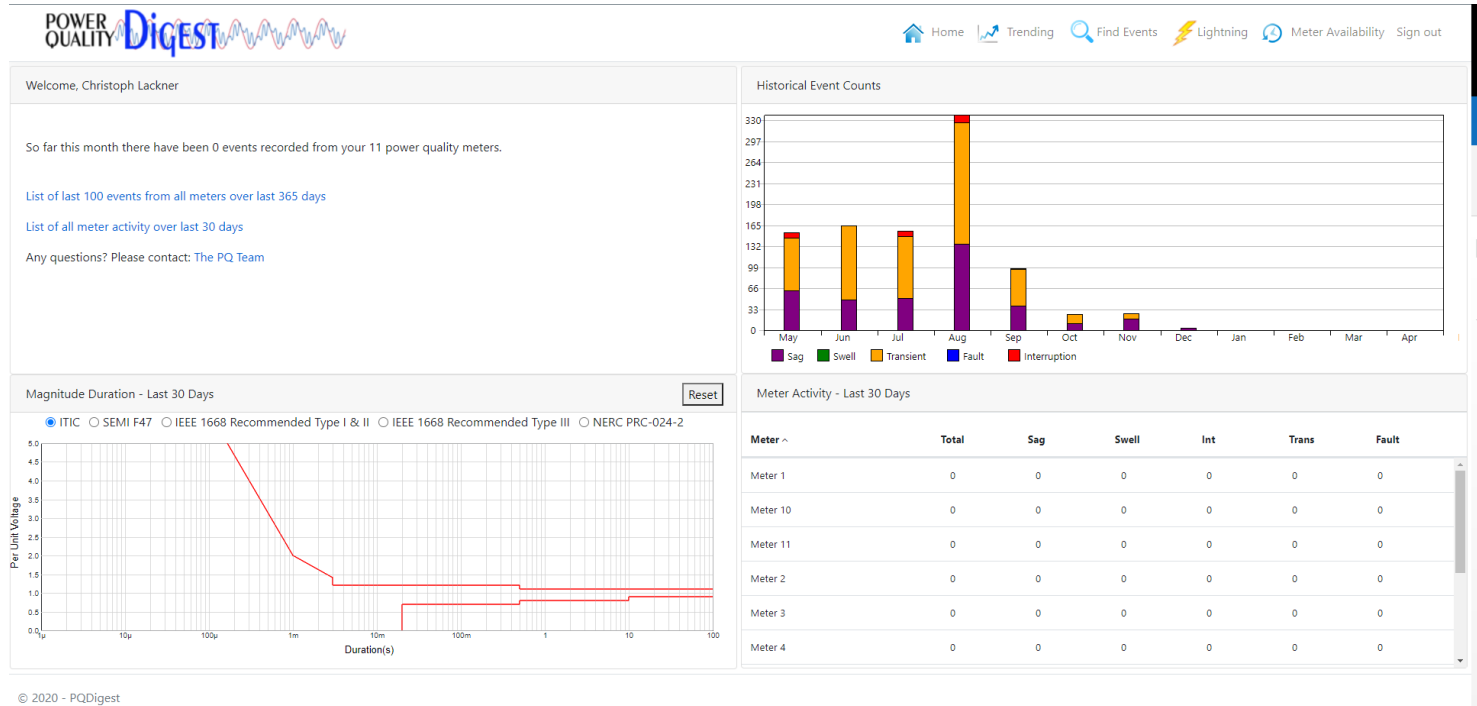
PQDigest – Trend Screen

- Few Clicks to Visualize

- Select Meters

- Select Channels

- Select Time Range
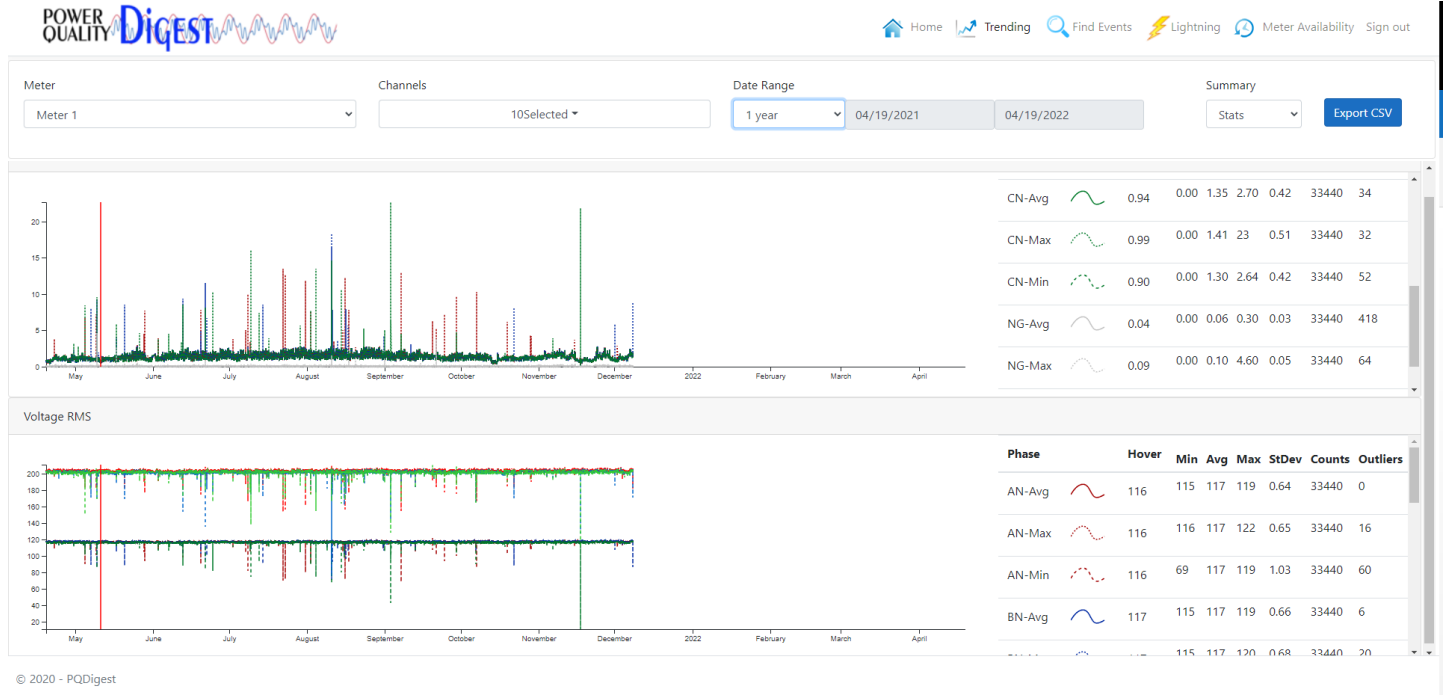
PQDigest – Events Screen

- ▪ Few Clicks to Visualize

- ▪ Select Meters

- ▪ Select Event Type

- ▪ Select Time Range

PQDigest – Find Lightning Screen

- Map Centers to GPS Coord. of Meter

- Auto Sets Time Window Around Event Time

- User Custom Settings for Time and Location
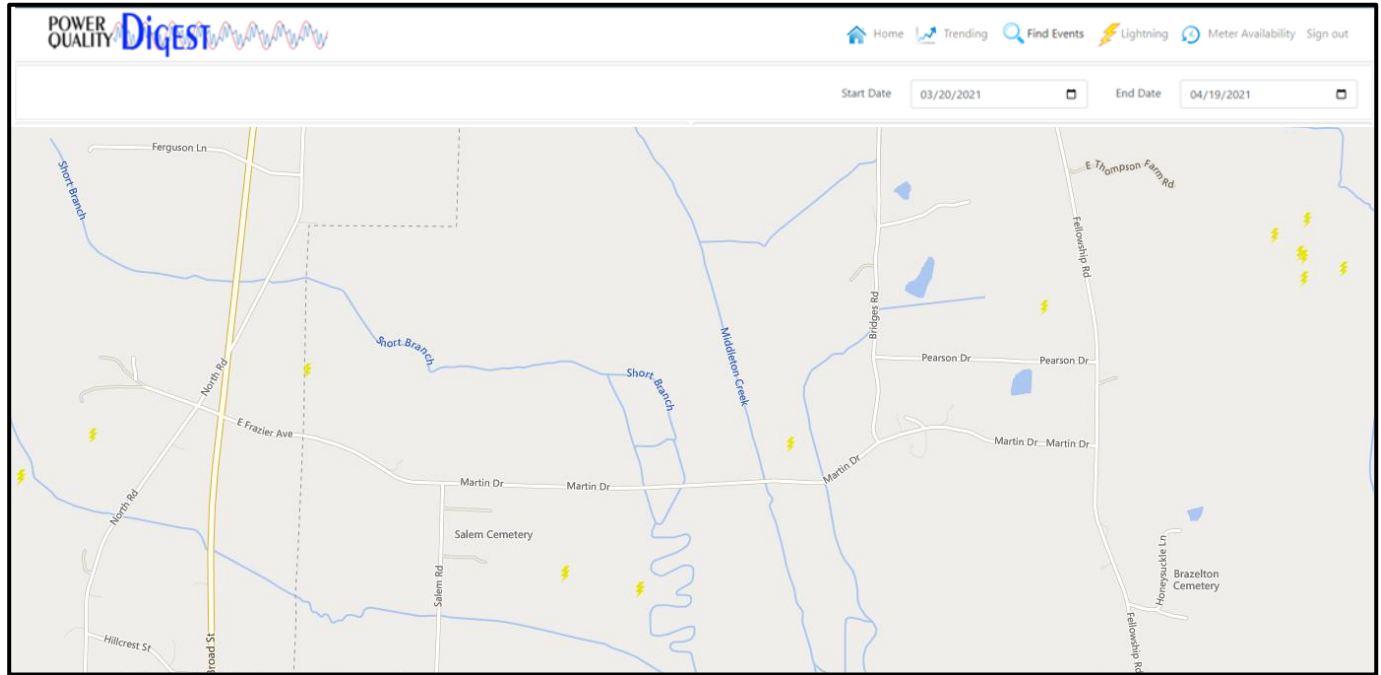
PQDigest – Meter Availability Screen

- Report of Any Data Gaps / Meter Outages

TrenDAP

- Data Sources (InfluxDB, Historian, etc.)

- Data Sets (Time Range, Meters, Channels)

- Workspace (Charts and Widgets)

TrenDAP

- Data Sources (InfluxDB, Historian, etc.)

- Data Sets (Time Range, Meters, Channels)

- Workspace (Charts and Widgets)

- Workflow

SE Browser – Enhanced Filtering

- Date / Time Quick Picks

SE Browser – Enhanced Filtering

- Date / Time Quick Picks

- Duration Filter

SE Browser – Enhanced Filtering

- Date / Time Quick Picks

- Duration Filter

- Phase Filter

SE Browser – Enhanced Filtering

- Date / Time Quick Picks

- Duration Filter

- Phase Filter

- Curve Filter

SE Browser – Enhanced Filtering

- Date / Time Quick Picks

- Duration Filter

- Phase Filter

- Curve Filter

- Magnitude Filter

SE Browser – Enhanced Filtering

- Date / Time Quick Picks

- Duration Filter

- Phase Filter

- Curve Filter

- Magnitude Filter
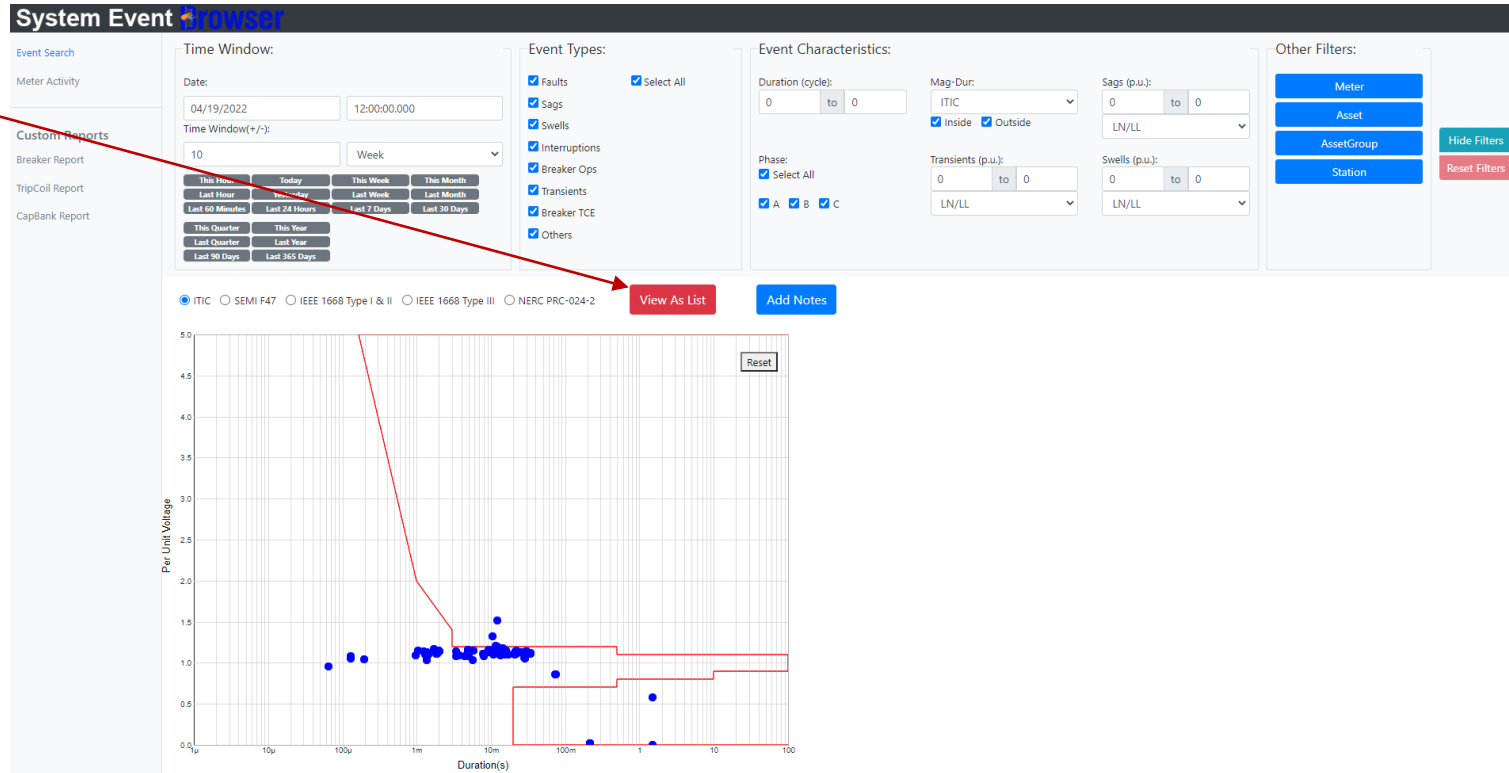
- Other Filters

SE Browser – Enhanced Filtering

- Date / Time Quick Picks

- Duration Filter

- Phase Filter

- Curve Filter

- Magnitude Filter

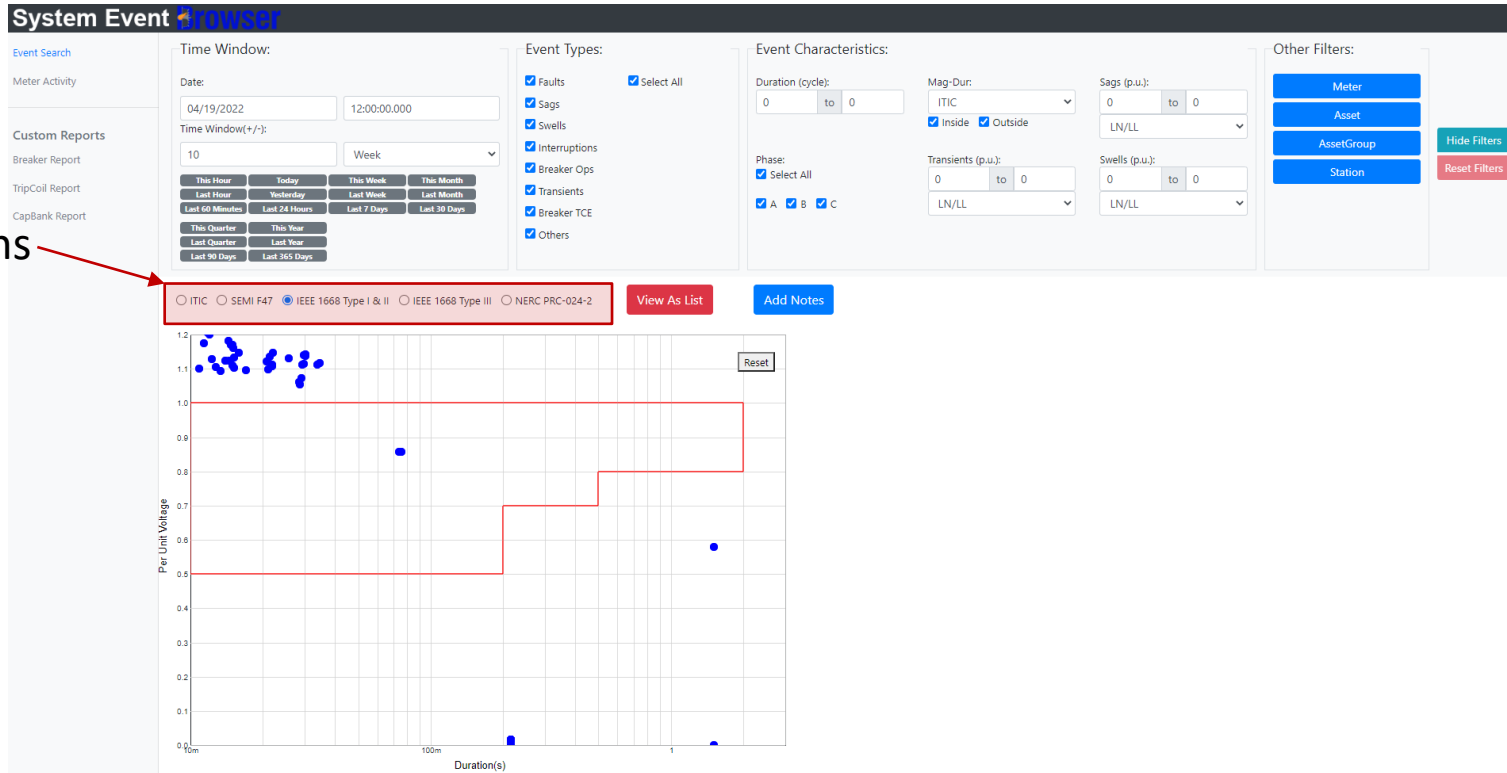- Other Filters

- Show / Hide & Reset Filters

SE Browser – Results Viewed as List or Plotted on Mag / Dur Curves
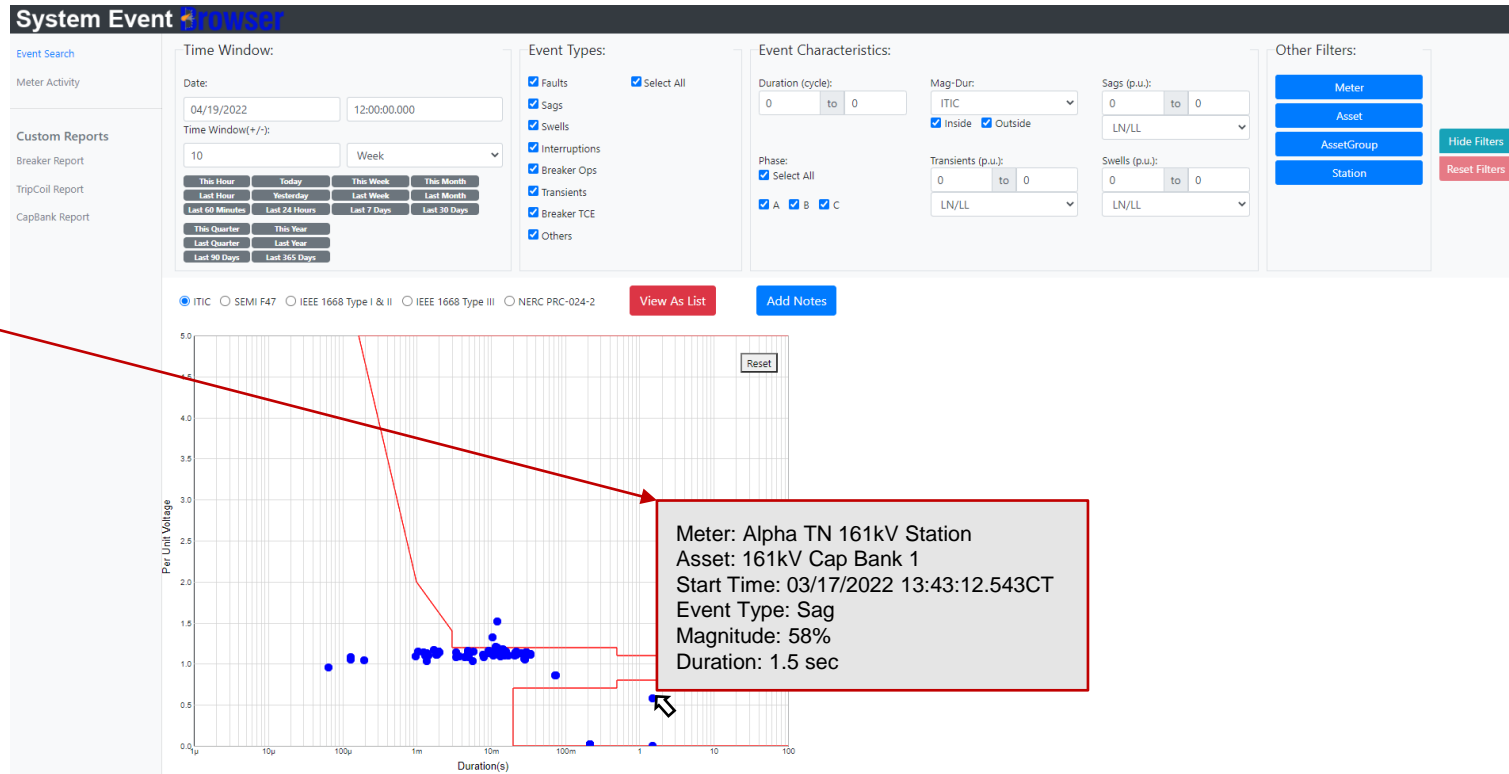
- List / Curve

SE Browser – Results Viewed as List or Plotted on Mag / Dur Curves

- List / Curve

- 5 Mag / Dur Curve Options

SE Browser – Results Viewed as List or Plotted on Mag / Dur Curves

- List / Curve

- 5 Mag / Dur Curves

- Hover Over & Select

SE Browser – Customize & Sortable List View

- Field Selection

SE Browser – Customize & Sortable List View

- Field Selection

- Sort by Headers

SE Browser – Custom Reports

- Asset Health

- KPIs

- Compliance (like 1547)

SE Browser – Custom Reports

- Asset Health

- KPIs

- Compliance (like 1547)

- Trend View

Email Subscriptions

- Organization Based (Transmission, Generation, Customer Service, etc.)

- Role Based (Operator, Engineer, Lineman, Account Manager, etc.)

- Area Based (Nashville, Memphis, Chattanooga, etc.)

- Email and/or Text

- Event Types (Faults, Asset Health, Lightning, etc.)

- On Demand (Faults, Incipient Failures, Lightning Warning, etc.)

- On Schedule (Asset Health Reports, Metrics, Compliance Reports, etc.)

- User Self Manages, Administrator Approves

- Authentication via Azure Active Directory; Cell Verification via Text Code

TENNESSEE VALLEY AUTHORITY

Tennessee Valley Authority