

Power Quality

Program 1



Project Set B

Integrating PQ Monitoring and Intelligent Applications to Maximize System Performance

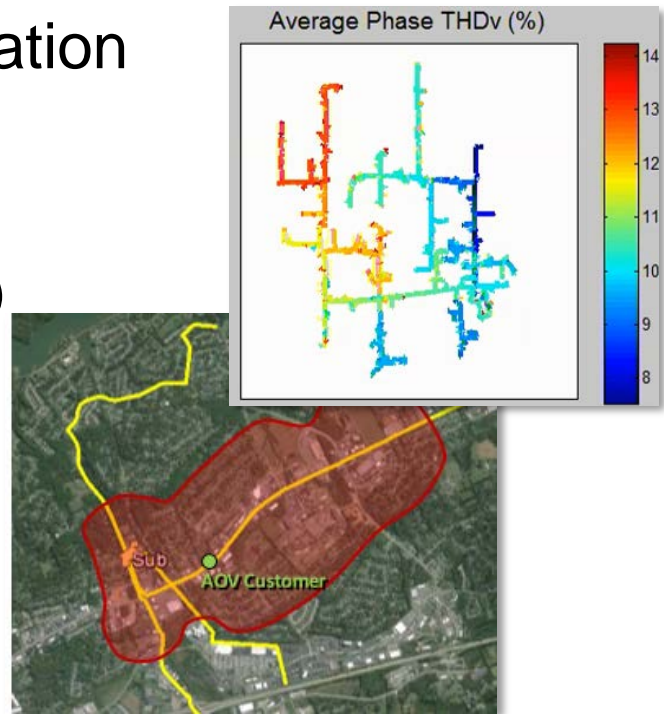
Project Set Chair: George Hoxworth, ConEdison

Project Manager: Tom Cooke, EPRI

10 April 2018

■ PQ Modeling Applications for Integration

- Harmonic Evaluation (HEM)
 - Tool Exist
 - Geospatial Processing (needs export)
- Area of Vulnerability (AOV)
 - No Tool
- Flicker Evaluation
 - Tool Exist
 - No Geospatial Output

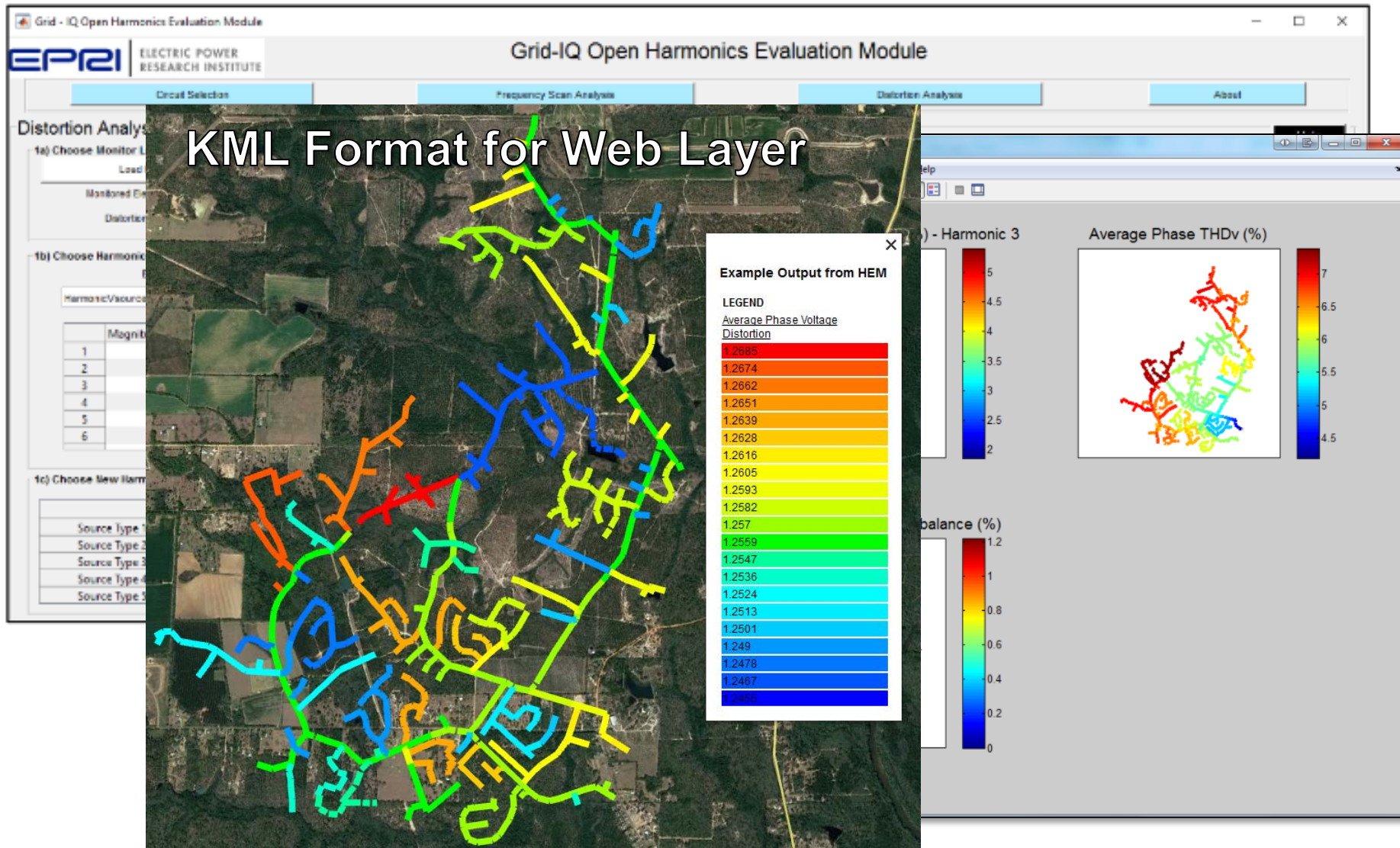


■ OpenDSS Format Integration for Dashboard

- Geospatial One-Line Layer
- Line formatting based on parameter values (thickness/color)

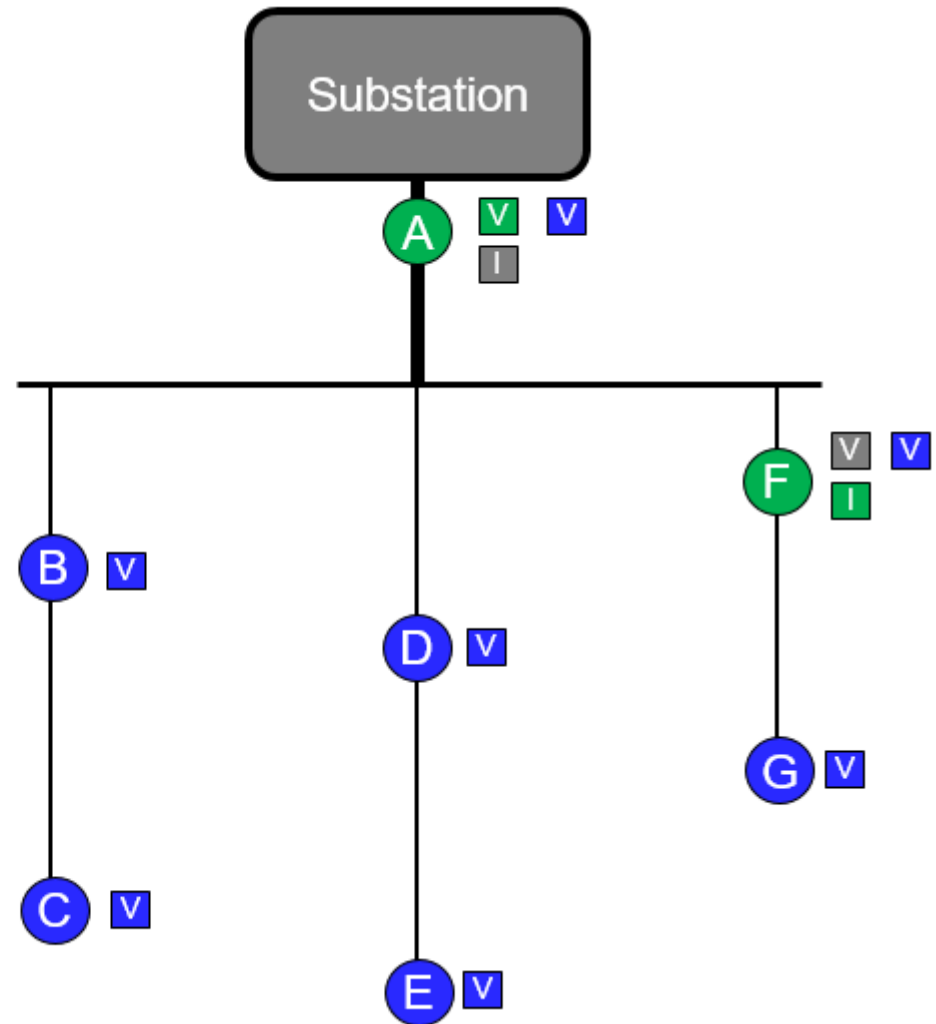
Proof of Concept

with Harmonic Evaluation Module (HEM)



Future Vision for Automated HEM Integration

Virtual PQ Metering



P001.004 – 2018 SOW



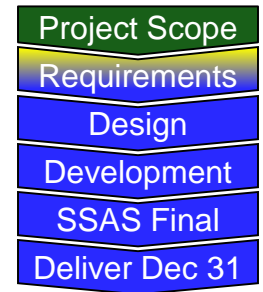
Title

- PQ Monitoring Analytics and Modeling Integration.

Description

- PQView 4 Data Integration via SDK
 - SDK Data Layer Complete
- Modeling Data Integration
 - Harmonics Evaluation Module
 - Export to KML (standard geographic format)

- Completed
- In Process
- Upcoming



Deliverable

- Software: Harmonics Evaluation Module w/KML Export
- Software: Open PQ Dashboard with PQView Data Handler & KML Import



Discussion

- What format is existing modeling/GIS? (Lat/Long, State-Plane, etc)
- Modeling Software?
 - Convert to OpenDSS?
- What parameters would be of value to plot?

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