

# Power Quality

## Program 1



## Project Set B

**Integrating PQ Monitoring and Intelligent  
Applications to Maximize System Performance**

**Project Set Chair: George Hoxworth, ConEdison**

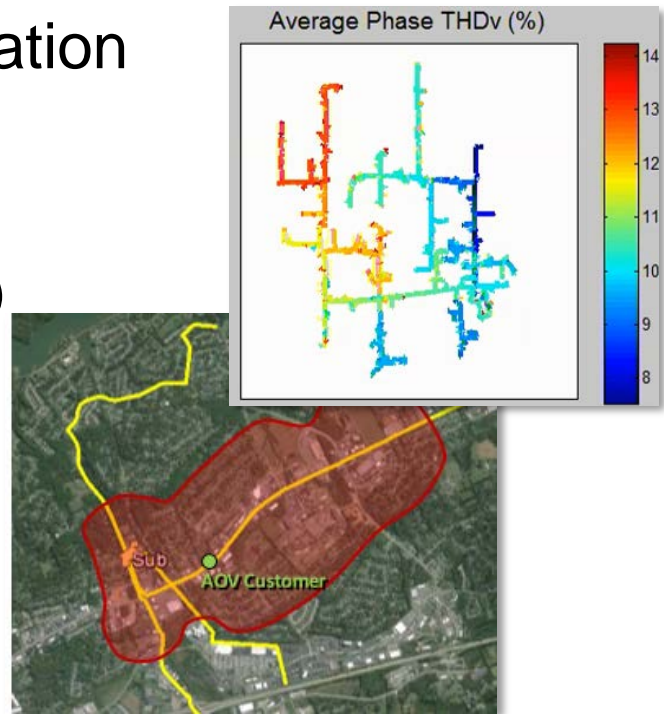
**Project Manager: Tom Cooke, EPRI**

# P1.004 Analytics and Modeling Integration



## ■ 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

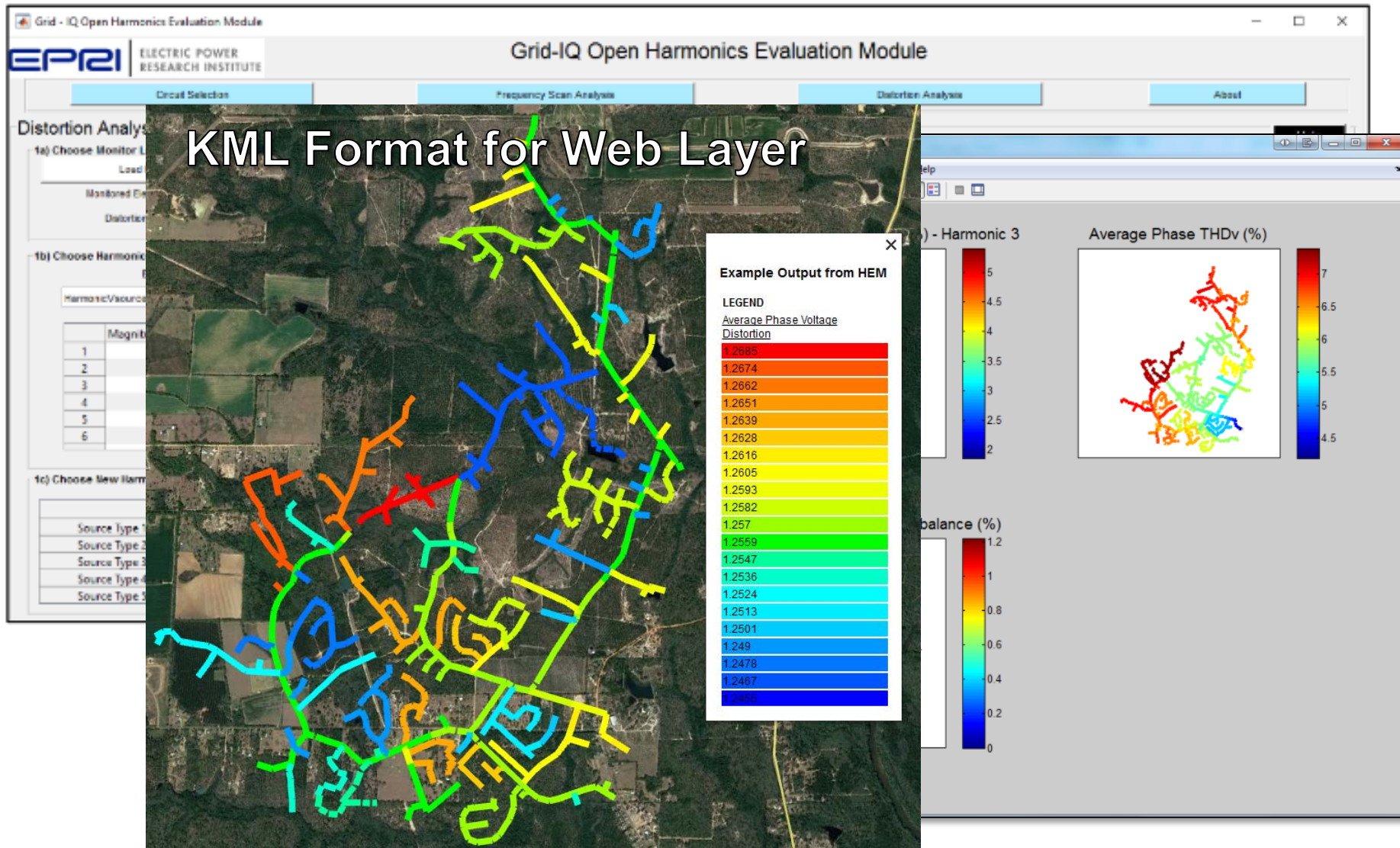


## ■ OpenDSS Format Integration for Dashboard

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

# Proof of Concept

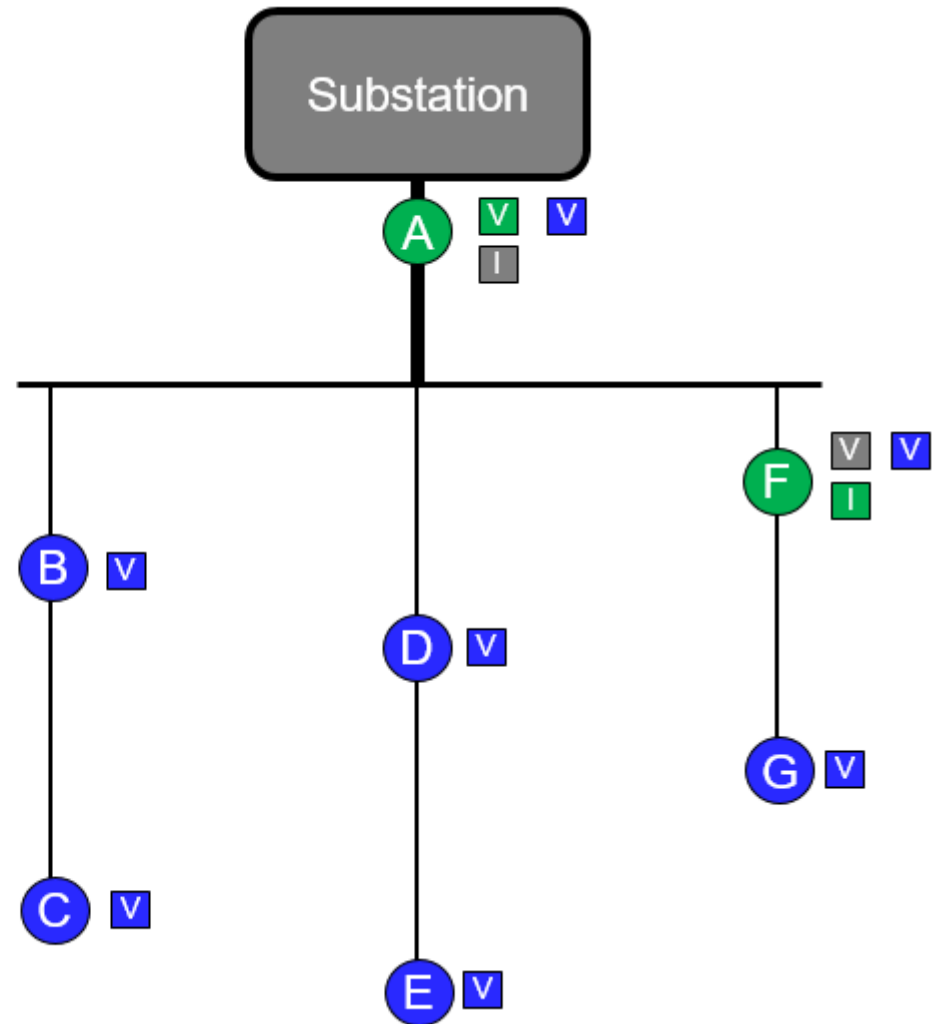
## with Harmonic Evaluation Module (HEM)





# Future Vision for Automated HEM Integration

## Virtual PQ Metering



# P001.004 – 2018 SOW



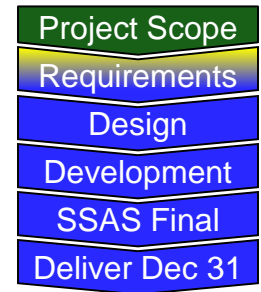
## Title

- 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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