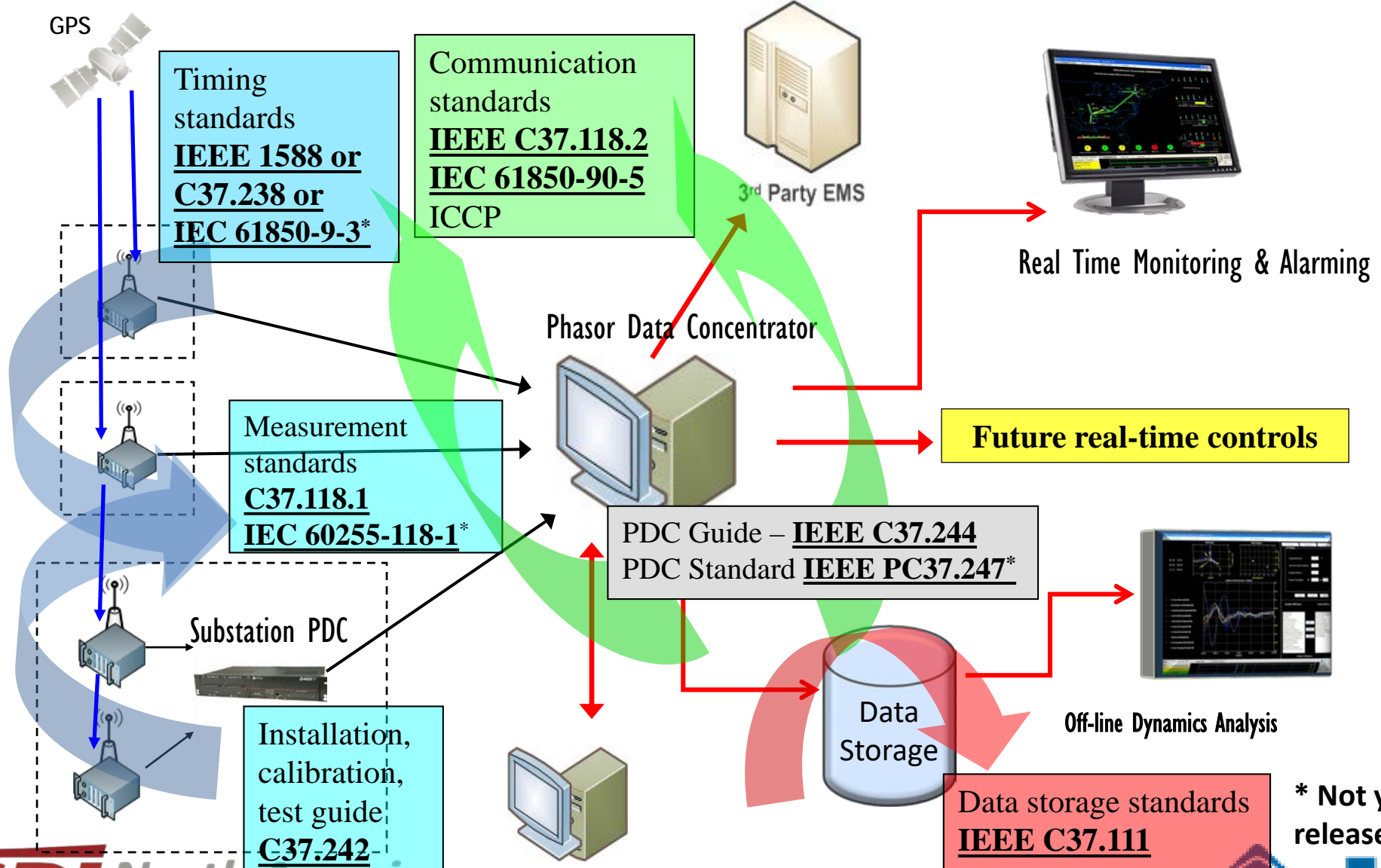# Coordination of Synchrophasor Related Activities

IEEE PES PSRC C23
(last met virtually on September 23, 2020)

Presented by:
Allen Goldstein
Chair

Phasor Measurement Systems

IEEE PES PSRC Activities

- C23: Coordination of Synchrophasor Related Activities
- C28: C37.242 IEEE Guide for Synchronizing, Calibration, Testing, and Installation of PMUs
- H40 Databases used in Utility Automation Systems
- CTF41: Investigate Measurement Performance Requirements for PMUs in Distribution System Applications
- C40: Summary C37.247 Standard for Phasor Data Concentrators
- H50: Requirements for Time Sources in Protection & Control Systems

IEEE PES PSCC activities

- P8: Recommended Mapping Approach between IEEE C37.118.2 and IEC 61850
- P9: Revision of C37.118.2 Synchrophasor Data Transfer for Power Systems
- P10: IEEE Standard for Streaming Telemetry Transport Protocol (IEEE P2664)
- P16 P1864: Review by PSCC for Communications and Cyber Security Requirement
- S5: Revision of IEEE C37.240 Cyber Security Requirements for Power System Automation, Protection and Control Systems
- S8: P2658 Guide for Cybersecurity Testing in Electric Power Systems
- S15: Study Group for Security of IEC 61850 GOOSE and Sampled Measured Values

Other IEEE activities

- ICAP: IEEE Synchrophasor Conformity Assessment Program

NASPI past work presented to C23

- CRSTT:
  - TRS & PNNL: Operational Use Cases for Time-Synchronized Measurements.
  - Using Synchrophasor Data to Determine Disturbance Location.
  - Using Synchrophasor Data for Oscillation Detection.
  - PMU versus SCADA Video Events Library.

- DNMTT:
  - NASPInet 2.0 Architecture Guidance (led by PNNL's Dr. Taft)
  - Utility survey of those collecting PMUs for architecture structure and analytics interface.

- PSRVTT:
  - Categorizing Phasor Measurement Units by Application Data Requirements.
  - A Guide for PMU Installation, Commissioning and Maintenance.

- DisTT:
  - Synchronized Measurements and their Applications in Distribution Systems: an update
  - DG-Load Disaggregation Use Case
  - Equipment Health Diagnostics Use Case
  - Fault Location Use Case
  - Phase Identification Use Case
  - Wildfire mitigation webinar

- EATT:
  - Data Mining Techniques and Tools for Synchrophasor Data.
  - Integrating Synchrophasor Technology into Power System Protection Applications.
  - Phase Angle Calculations: Considerations and Use Cases.

NASPI current work presented to C23

- CRSTT:
  - Focus Area Documents will now be used to develop Use Case Documents with the DisTT.
- DNMTT:
  - Utility Archive Survey Pre-Report: Fall 2020.
  - A call for NASPI WG Meeting Vendor Paper Submission: December 31, 2020.
  - Synchrophasor Application-Based Guide for Archive and Network Strategies: Fall 2021 WG Meeting.
- DisTT:
  - Use Case documents development with CRSTT.

- EATT:
  - Focus Area Documents will now be used to develop Use Case Documents with the DisTT.
- PSRVTT:
  - IEEE C37.242 and C37.118.2 standards are being updated.
  - IEEE PE/PSCC P2664 Standard for Streaming Telemetry Transport Protocol.
  - IEEE PES PSRC Task Force C41 Investigate Performance Requirements for Distribution PMUs

Discussions and new business

- Gustavo Brunello volunteered to be the C23 Vice Chair (Thank you Brunello)
- The PSRC Task Force to look into creating educational material was disbanded. There were many great ideas floated but no-one had any time to volunteer to act upon any of the ideas.
- There was a discussion about creating a database of sampled value power system data (measured or simulated) and "ideal" synchrophasor representations that would come from those.

Thank you

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