



U.S. DEPARTMENT OF
ENERGY

Advanced Synchrophasor Protocol – DE-OE-859

D&NM Task Team



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ASP Project Summary

Objective

- To document and implement a phasor data communication protocol that improves upon the IEEE C37.118 protocol



Schedule

- Apr 2017 – March 2019
 - Develop Specification
 - Develop APIs
 - Demonstrate
 - Publish

Prime: Grid Protection Alliance

Major Demo Partners:

WSU, EPG
SPP, TVA, PJM
Dominion, OG&E, SDG&E

Federal Cost: \$1,083 M

Cost Share: \$1,206 M

Total Value of Award: \$2,289 M

Funds Expended to Date: Less than 1%

STTP will improve on GEP

- Documentation to enable understanding and interoperability and to promote use
- Stand-alone API-style code that can be integrated into any development platform/project
- Expanding and extending metadata fields
 - Minimum required set of metadata fields
 - Capability for metadata versioning
- Security – communications established from the higher security zone
- Refinement
 - Simplify throughout
 - Drop any obsolete or relatively unused GEP functionality

Where We Could Use Assistance

- Critical review of protocol specification
- Testing of the open-source protocol implementations for scalability, reliability and ease of use
- Demonstration of the protocol within existing applications as an additional streaming time-series data feed

Opportunities for interacting with the D&NMTT

■ October 2017

- Specification Requirements
- Initial API Design

■ March 2018

- Protocol Specification Draft
- Alpha Versions of API and Tool Kits

Opportunities for interacting with the D&NMTT

■ October 2018

- Protocol Specification Published
- Beta API and Tools
- Protocol Demonstration Plans

■ March 2019

- Protocol Demonstration Results Published
- API and Tools Release Version 1.0

DOE Acknowledgement & Disclaimer

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