

NERC

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

Use of COMTRADE for Exchange of PMU Data

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to ensure
the reliability of the
bulk power system

- IEEE Standard (C37.111-1999) – Common Format for Transient Data Exchange for Power Systems
- Uses multiple files for a single data record
 - Files have same root filename but different extensions
 - Required: configuration (.CFG) and data (.DAT)
 - Optional: header (.HDR) and information (.INF)
- Applicable to PMU data
- Required for Disturbance data by NERC Standard PRC-002-1 (R4)
- Any application that accesses stored PMU data should be capable of outputting the data in COMTRADE format

IEEE PSRC Working Group H8 (HTF1)

- Schema for Phasor Data Using the COMTRADE File Standard
 - Available at <http://www.pes-psrc.org/> -> Published Reports -> Click here to go to PSRC Publications Page
- IEEE Standard C37.118 (IEEE Standard for Synchrophasors for Power Systems) does not define a format for recorded data exchange
- H8 schema describes how to place synchrophasor data into the COMTRADE format
 - Describes treatment of quantities defined by C37.118
- Further Information – Presentation by Ken Martin at PSTT/DNMTT joint session