

Sub.net conformance with NERC requirements

Sub.net includes the functionality of a Sequence of Events Recorder (SER), a Fault Recorder (FR) and a Dynamic Disturbance Recorder (DDR). These meet or exceed the requirements of NERC PRC-002-1, PRC-018-1 and the draft of PRC-002-2. Details of the individual sections are given below.

PRC-002-1

- R2.2.2 Sample rate is 128 samples per cycle
- R3.2.2 Sample rate is 7680 samples second; RMS is 10 records per second
- R4.4 COMTRADE is the native raw data file format
- R4.5 File naming scheme is supported

PRC-018-1

- R1.1 Time accuracy is better than 1 μ s with GPS option
- R1.2 Data retention is at least 14 days

PRC-002-2

- R3 Time accuracy is better than 1 μ s with GPS option
- R6.2 Sample rate is 128 samples per cycle
- R9.2 Sample rate is 7680 samples second
- R9.3 RMS is 10 records per second
- R12 Time accuracy is better than 1 μ s with GPS option
- R13 Data retention is at least 14 days

Sub.net includes strong Cyber Security credentials. Sub.net is based on the eMS proprietary computing platform, and avoids unsafe commercial operating systems. Sub.net is never in danger from malicious software such as viruses or malware, or security patch maintenance management worries.

CIP-003-3

- R5 Access control via multi-level users with password protection

CIP-005-3

- R2 secure dial-up access.
- R3 logging of all access attempts.

CIP-007-3

- R2 HTTP, Synchrophasor, Modbus ports are enabled.
- R5 All user logins and changes are logged for auditing purposes.
- R6 logs security incidents as required in CIP-008-3.