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Technical
Specification

**Substation Information
Control and Protection
Local Area Network**

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SUBSTATION INFORMATION CONTROL AND PROTECTION LOCAL AREA NETWORK

FOREWORD

This specification is a station function specification within the Substation Information, Control and Protection suite of technical specifications. This specification is to provide open access to information and data in substations wherever it is required. To enable this a Local Area Network (LAN) infrastructure is required. The equipment specified in this document will facilitate the information requirements for today and the data requirements of the future.

1 SCOPE

This specification describes the functional and performance requirements and the facilities to be provided for the communication media, devices and protocols required to implement a LAN for use as a substation information bus. It defines the interfaces to the appropriate bay level specifications.

Informative: There may be several LANs within the substation serving various applications. The SICAP LAN is a station wide LAN with a WAN connection and is used primarily for information, but as specified here it is also capable of transporting process type data. In most instances system specific LANs will be installed at the substation first and the SICAP LAN will share the common infrastructure. This specification details common infrastructure requirements along with those elements specific to the information LAN. Appendix A gives more details.

2 REFERENCES

This Specification makes reference to, or should be read in conjunction with the following documents:

