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National Grid

National Grid
Technical
Specification

Capacitor Protection

NGTS 3.24.77
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CAPACITOR PROTECTION

FOREWORD

This Specification is a functional specification within the Substation Control and Protection suite of technical specifications. It shall be called up and applied by appropriate bay level specifications for mechanically switched capacitors (MSCs) and static VAR compensators (SVCs).

1 SCOPE

This Specification details the functional and performance requirements for capacitor protection on National Grid's 400 kV, 275 kV, 132 kV and 13 kV systems. It covers Capacitor Excessive RMS Overcurrent Protection, Capacitor Overvoltage Protection and Capacitor Out-of-Balance Protection for reactive compensation plant.

2 REFERENCES

NGTS 1	Ratings and General Requirements for Plant, Equipment, Apparatus and Services for the National Grid System and Connection Points to It
NGTS 3.2.4	Current Transformers for Protection and General Use on the 132 kV, 275 kV and 400 kV Systems
NGTS 3.2.5	Voltage Transformers for Use on the 132 kV, 275 kV and 400 kV Systems
NGTS 3.24.4	Hardware Platform
NGTS 3.24.11	Mechanically Switched Capacitors Bay Functions
NGTS 3.24.13	Static VAR Compensators Bay Functions
IEC 255-1-00	Electrical Relays - All or Nothing Electrical Relays
IEC 255-6	Electrical Relays - Measuring Relays and Protection Equipment Functional requirements

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