



Distribution management systems

Each Distribution Network Operator uses many thousands of kilometres of cable, either overhead or underground, to supply power to its customers. Statutory requirements dictate that any outages are minimised both in frequency and duration.

As a result, faults on the network must be bypassed as quickly as possible. Where maintenance is required, detailed planning is needed to reduce the number of customers off supply.

Keeping track of the state of the network and the location of the open points that define the routing of power is a major undertaking, given the complex networks used which often change daily as plant is switched or additional connections are made.

We can provide distribution management systems to support your control room in these tasks.

overhead

underground



Solution

The network is modelled topologically showing the possible routes power can take from substation feeders at each voltage. By 'dressing' the map to show the states of switches, an up-to-date model of the power network can be maintained. Where coupled with remote monitoring and control, the dressing can be automatic.

From this basic model, tools can be built to allow planning of switching sequences, maintain records of asset usage, choose the most efficient distribution configurations, and allow day to day changes to the networks to be recorded and integrated.

DMS systems can provide coverage of an entire utility or just a small section from an area office.

Benefits

- Saving of manpower by providing tools that record the state of the network and assist planning
- Rapid reassessment of the network in the event that a fault occurs
- Reduction of space required in a control room for paper drawings and usually the elimination of a wallboard
- Better records of assets and maintenance schedules

Our capability

Schneider Electric has a long history of building DMS systems, both large and small including web-based displays for field-based personnel. We have a team of experts who can provide impartial advice on the features and requirements of new schemes, or enhancements to old.

