Barlaston / Meaford BSP

Scheme description

Both N-1 and N-2 constraints seen at Meaford BSP (N-1 for either GT and N-2 for both GTs). Reinforcement solution is to install a new feeder circuit and GT at Meaford BSP.

Justification for decision

Flexibility is not suitable here due to the N-2 loss of supply constraint.

Constraint Information

Outage Type N-2
Constraint Type Security of Supply

Reinforcement Information

Completion Year 2027
Current Status Preliminary

DNOA Decision
Reinforce

Bayston Hill to Malehurst

Scheme description

Part of the Shrewsbury ring which has thermal, voltage, step change, and generation driven constraints. Reinforcement solution includes upgrading and reconfiguring the existing network and installing a new Bayston Hill – Malehurst 33 kV circuit.

Justification for decision

Flexibility is not suitable here due to the complex constraints, severe voltage restrictions, and step change restrictions.

Constraint Information

Outage Type N-1
Constraint Type Thermal

Reinforcement Information

Completion Year 2027
Current Status Preliminary

DNOA Decision
Reinforce

Berrington Primary

Scheme description

Transformer is expected to overload under intact and N-1 conditions. In addition to this, the transformer is protected via fuses and there are no analogues on site to facilitate flexibility services. Reinforcement solution is to uprate the transformer and the 11 kV interconnection.

Justification for decision

Flexibility is not suitable here due to the lack of monitoring equipment; the transformer is also being replaced on condition.

Constraint Information

Outage Type Intact
Constraint Type Thermal

Reinforcement Information

Completion Year 2026
Current Status Preliminary

DNOA Decision
Reinforce

Cellarhead Network

Scheme description

The constraints include thermal (demand and generation), fault level, and operability limitations. Reinforcement solution is to install an additional 132 kV circuit into the group and reconfigure the network.

Justification for decision

Flexibility is not suitable here due to fault level, operability, and generation constraints.

Constraint Information

Outage Type N-2
Constraint Type Thermal

Reinforcement Information

Completion Year 2028
Current Status Preliminary

DNOA Decision
Reinforce

Chipping Sodbury

Scheme description

Both N-1 and N-2 constraints at Chipping Sodbury BSP (N-1 for either GT and N-2 for both GTs). Reinforcement solution is to establish a new BSP.

Justification for decision

Flexibility is not suitable here due to the complex constraints and being unable to resolve the N-2 loss of supply restriction.

Constraint Information

Outage Type N-1
Constraint Type Security of Supply

Reinforcement Information

Completion Year 2027
Current Status Preliminary

DNOA Decision
Reinforce

Hinksford to Wribbenhall

Scheme description

The 33 kV network between Hinksford and Stourport has thermal and severe voltage constraints during 33 kV outages. Reinforcement solution is to install an additional infeed and to reconfigure parts of the network.

Justification for decision

Flexibility is not suitable here due to the severity of the voltage constraints.

Constraint Information

Outage Type N-1
Constraint Type Voltage

Reinforcement Information

Completion Year 2027
Current Status Preliminary

DNOA Decision
Reinforce

Ironbridge to Star Aluminium

Scheme description

Voltage constraint seen for an outage of the direct Ironbridge – Star Aluminium 33 kV circuit. Reinforcement solution is to install an additional 33 kV circuit from Ironbridge to Star Aluminium.

Justification for decision

Flexibility is not feasible here due to the severity of the voltage constraint.

Constraint Information

Outage Type N-1
Constraint Type Voltage

Reinforcement Information

Completion Year 2027
Current Status Preliminary

DNOA Decision
Reinforce

Lea Marston to Copt Heath

Scheme description

An outage affecting supplies to the Lea Marston-Elmdon 132 kV circuit causes a thermal constraint on the Lea Marston-Copt Heath circuits. Reinforcement solution is to uprate these tower line circuits.

Justification for decision

Flexibility is not suitable here due to the complexity of the constraint and varying sensitivity factors.

Constraint Information

Outage Type N-1
Constraint Type Thermal

Reinforcement Information

Completion Year 2025
Current Status Preliminary

DNOA Decision
Reinforce