

Pembroke to Broadfield

Scheme description

An N-1 outage for the loss of the Golden Hill – St Florence circuit results in the Pembroke South – Broadfield circuit thermally overloading. The reinforcement solution is building a new 33 kV circuit between Golden Hill and Broadfield.

Justification for decision

Flexibility is not suitable to manage this constraint due to the severity of the voltage constraint.

Constraint Information

Outage Type N-1
Constraint Type Voltage

Reinforcement Information

Completion Year 2024 / 2025
Current Status Preliminary



DNOA Decision
Reinforce

Haverfordwest to Brawdy

Scheme description

An N-1 outage of the Haverfordwest to Fishguard circuit leaves several primary substations supplied by the remaining Haverfordwest to Brawdy circuit. This also leads to voltage issues. Reinforcement solution is to build a new 33 kV switchboard at Haverfordwest and new circuit to Brawdy.

Justification for decision

Flexibility is not suitable to manage this constraint due to the demand growth at Fishguard leading to both thermal and severe voltage constraints.

Constraint Information

Outage Type N-1
Constraint Type Thermal

Reinforcement Information

Completion Year 2026 / 2027
Current Status Preliminary



DNOA Decision
Reinforce

Cardiff North circuits

Scheme description

An N-2 outage for the loss of two 33 kV circuits in the Cardiff East & Cardiff North group leads to the potential overload of the remaining circuits.. The proposed reinforcement is to install two new 33 kV circuits between Cardiff North and Heath primary.

Justification for decision

Flexibility is not suitable to manage this constraint due to its complexity.

Constraint Information

Outage Type N-2
Constraint Type Thermal

Reinforcement Information

Completion Year 2024 / 2025
Current Status Preliminary



DNOA Decision
Reinforce



Rhos BSP

Scheme description

An N-2 condition losing both Grid Transformers (GTs) at Carmarthen Bulk Supply Point (BSP) overloads the GT at Rhos BSP. Proposed reinforcement is to install a second GT at Rhos BSP.

Justification for decision

Flexibility is not suitable to manage this constraint due to its complexity.

Constraint Information

Outage Type N-2
Constraint Type Thermal

Reinforcement Information

Completion Year 2024
Current Status Preliminary



DNOA Decision
Reinforce

Sully Tee circuit

Scheme description

N-1 constraint on the section of 132 kV circuit from Aberthaw Grid Supply Point (GSP) to the tee to Sully Bulk Supply Point (BSP). Proposed reinforcement is to re-profile the section of overhead line.

Justification for decision

Flexibility is not suitable to deal with this constraint as the reinforcement solution is below the cost threshold for economic viability.

Constraint Information

Outage Type N-1
Constraint Type Thermal

Reinforcement Information

Completion Year 2024
Current Status Preliminary



DNOA Decision
Reinforce

Swansea North GSP to Rhos BSP

Scheme description

An N-2 constraint for the loss of the dual circuit 132 kV H route between Carmarthen and Rhos, leaves customers at risk of rota disconnection until a circuit is restored. The reinforcement solution is a new 132 kV circuit between Swansea North GSP and Rhos BSP.

Justification for decision

Flexibility is not suitable to manage this constraint due to its complexity.

Constraint Information

Outage Type N-2
Constraint Type Thermal

Reinforcement Information

Completion Year 2027 / 2028
Current Status Preliminary



DNOA Decision
Reinforce



Golden Hill to St Florence

Scheme description

An N-1 outage for the loss of the Golden Hill – St Florence circuit results in the Pembroke South – Broadfield circuit and connected primaries dropping below the statutory voltage limit. The reinforcement solution is building a new 33 kV circuit between Golden Hill and Broadfield.

Justification for decision

Flexibility is not suitable to deal with this constraint due to the amount of flexibility required and the severity of the voltage issue.

Constraint Information

Outage Type N-1
Constraint Type Thermal

Reinforcement Information

Completion Year 2024 / 2025
Current Status Preliminary



DNOA Decision
Reinforce

Rhos to Newcastle Emlyn

Scheme description

An N-1 condition for the loss of one of the 33 kV circuits to Newcastle Emlyn primary heavily loads the remaining circuit. Proposed reinforcement is to uprate the limiting section of circuit.

Justification for decision

Flexibility is not suitable to deal with this constraint due to the interconnected 33 kV network with varying sensitivity factors.

Constraint Information

Outage Type N-1
Constraint Type Thermal

Reinforcement Information

Completion Year 2024
Current Status Preliminary



DNOA Decision
Reinforce

