

Aberaeron

Scheme description

Aberaeron is a single transformer site. For an N-1 outage of the transformer, the site is limited by the 11 kV backfeeds. Reinforcement involves voltage compensation and/or circuit reinforcement.

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 2027
Current Status Preliminary



DNOA Decision
Reinforce

Llanfyrnach

Scheme description

Llanfyrnach is a single transformer site. For an N-1 outage of the transformer, the site is limited by the 11 kV backfeeds. The proposed reinforcement solution is to install a second 33/11 kV transformer and a new 33 kV circuit to Llanfyrnach.

Justification for decision

Flexibility is not suitable here due to the complexity of the interconnected 11 kV network associated with the single transformer primary.

Constraint Information

Outage Type N-1
Constraint Type Thermal

Reinforcement Information

Completion Year 2027
Current Status Preliminary



DNOA Decision
Reinforce

Rhos BSP

Scheme description

An N-2 condition losing both GTs at Carmarthen 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 2027
Current Status Preliminary



DNOA Decision
Reinforce



Llandrindod Wells Primary

Scheme description

An N-1 scenario for the loss of one transformer at Llandrindod Wells primary causes and overload of the remaining transformer. The proposed reinforcement solution is the replacement of both 66/11 kV transformers to higher rated units (12/24 MVA).

Justification for decision

The transformers are now due for asset replacement, and the constraint has been pushed back to beyond completion of these works.

Constraint Information

Outage Type N-1
Constraint Type Thermal

Reinforcement Information

Completion Year 2027
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 this 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 2026
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 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 and Voltage

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 manage this constraint due to its complexity.

Constraint Information

Outage Type N-1
Constraint Type Thermal

Reinforcement Information

Completion Year 2026
Current Status Preliminary



DNOA Decision
Reinforce

Milford Haven BSP

Scheme description

Under N-2 scenarios the entire group could be fed via just one 132 kV circuit. The proposed reinforcement solution is to install a fourth 132 kV circuit between Pembroke GSP and Milford Haven BSP. Additional works include extending the existing 132 kV mesh layout at Milford Haven.

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 2030
Current Status Preliminary



DNOA Decision
Reinforce



St Davids Primary

Scheme description

St Davids primary is a single transformer site with constraints on the 11 kV interconnection. The proposed reinforcement solution is to install a second 33/11 kV transformer and a new 33 kV circuit from St Davids to Brawdy primary substation.

Justification for decision

Flexibility is not suitable here due to the complexity of the interconnected 11kV network associated with the single transformer primary.

Constraint Information

Outage Type N-1
Constraint Type Thermal

Reinforcement Information

Completion Year 2027
Current Status Preliminary



DNOA Decision
Reinforce

Llanfoist

Scheme description

N-1 constraint for the loss of one of the Super Grid Transformers (SGTs) at Rassau Grid Supply Point (GSP) will result in the remaining SGT overloading in the future. Reinforcement involves installing a new SGT at/in the vicinity of Rassau GSP.

Justification for decision

Flexibility is not suitable to manage this constraint as it is on the transmission network.

Constraint Information

Outage Type N-1
Constraint Type Thermal

Reinforcement Information

Completion Year 2030
Current Status Preliminary



DNOA Decision
Reinforce

