SSEN Distribution

DNOA OUTCOMES REPORT

March 2026

Scottish & Southern Electricity Networks

DSO Powering Change

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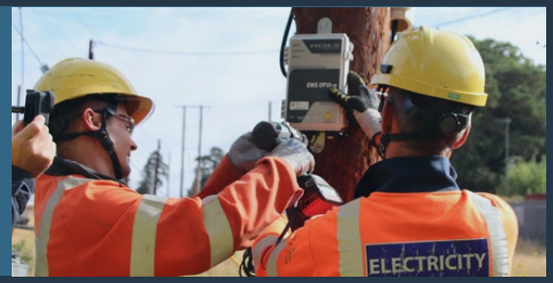

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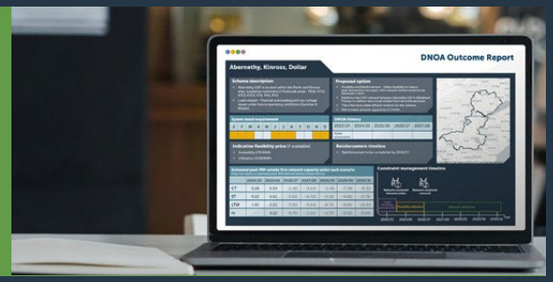

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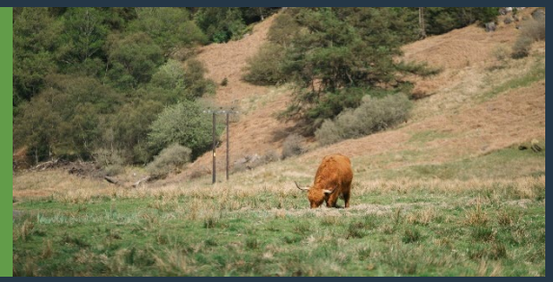

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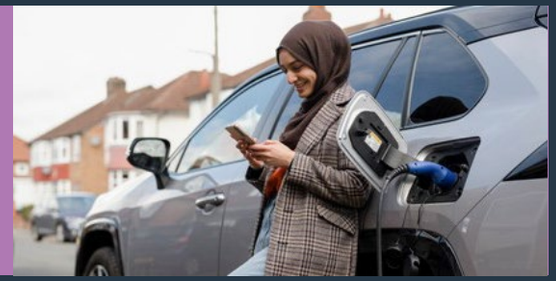
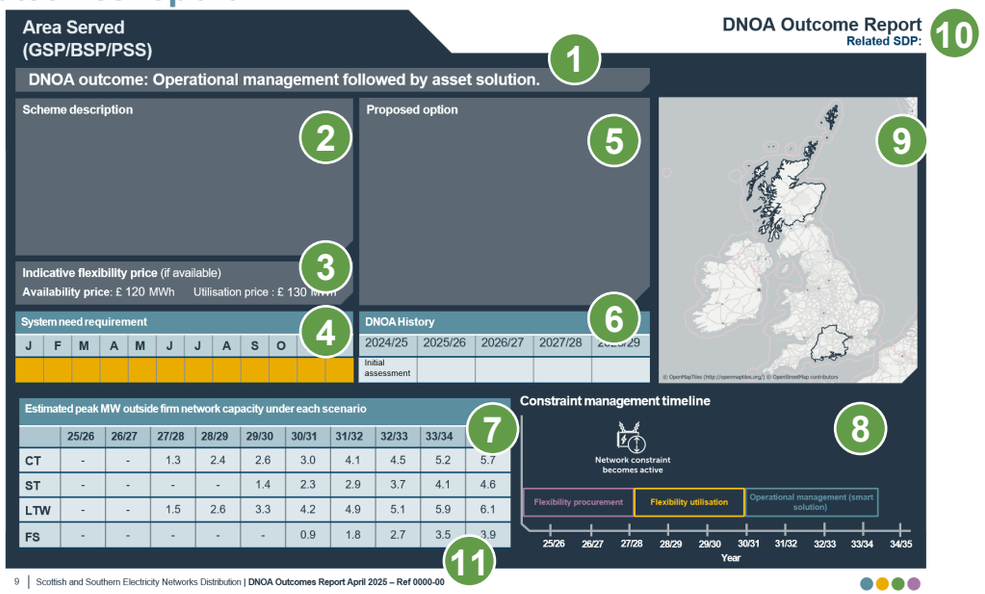


How to view this report

The following guidance note can be used to help navigate each outcomes report



9 | Scottish and Southern Electricity Networks Distribution | **DNOA Outcomes Report April 2025 – Ref 0000-00**

1 DNOA outcome:

- The overall DNOA outcome from the process.

2 Scheme description:

- This section describes the location where a system need has been identified and where capacity is released (if relevant). This is accompanied with indicative postcodes for the customer areas related to this scheme as well as the relevant local authorities.
- The type of constraint on the network is included.

3 Indicative flexibility price:

- The indicative average flexibility price used in the technoeconomic assessment is given in this section where relevant and available. This is typically in a 2020/21 price base.
- This is given as an availability (£/MW/h) and utilisation (£/MWh) price.

4 Proposed option:

- An outline of the proposed solution option aligned with the defined outcomes in the DNOA methodology. A summary of where the proposed option resolves constraints and for how long is also provided.
- An estimated value for the capacity released by the delivery of any works required can be found here. It does not necessarily relate to available capacity.

5 System need requirement:

- This table highlights in yellow the months of the year where there is a potential system need due to the constraint arising.

6 DNOA history:

- A record of the outcome report status.

7 Estimated peak MW outside firm capacity:

- The forecasted exceedance of load over the firm capacity of the relevant area of the network. Numbers in parenthesise indicate exceedance without network reinforcement.

8 Constraint management timeline:

- The timeline illustrates the stages needed to remove the constraint from the network.
- **For schemes proposing to procure flexibility:** The first stage (purple) is an indicative 2year initial flexibility procurement window where any required services will be acquired. The second stage (yellow) indicates the years where the option uses flexibility services to release more capacity. The last stage (green) indicates the year when capacity will be increased on the network to relieve the constraint.
- **For schemes proposing an asset solution:** The timeline indicates when capacity will be increased on the network to relieve the constraint.

9 Scheme map:

- The map provided shows the approximate geographical area covered by the scheme.

10 Related SDP:

- The Strategic Development Plan (SDP) which covers the area referred to in the report is noted.

11 Reference:

- The reference number for each DNOA outcome report is included in the index on pages 4 – 7.

Index of DNOA outcomes SHEPD

1 Procure Flexibility Solutions *see below the DNOA Outcome Reports proposing flexibility opportunities*

DNOA outcome	Flexibility utilisation period	Indicative postcode areas
Ref.0326-06 Moray (Dufftown PSS) – Pg.8	2027/2028 – 2029/2030 (2 years)	AB38, AB55
Ref.0326-08 Muir of Ord (Beauly GSP) – Pg. 15	2025/2026 – 2028/2029 (3 years)	AB23, IV1, IV2, IV24, IV3, IV4, IV5, IV6, IV7, IV8
Ref.0326-08 Muir of Ord (Beauly GSP) – Pg. 15	2025/2026 – 2029/2030 (4 years)	KW15, KW16, KW17

2 Asset Solutions *see below the DNOA Outcome Reports proposing asset solutions only*

DNOA outcome	Capacity increase from	Indicative postcode areas
Ref.0326-01 Aberdeenshire (Kintore GSP and Skene PSS) – Page 7	2029/2030	AB11, AB13, AB15, AB21, AB32, AB51
Ref.0326-03 Fort William (Lochailort Regulator) – Page 10	2028/2029	PA34, PA80, PH31, PH33, PH34,PH36-41
Ref.0326-04 Fort William (Fort William 33kV Network) – Page 11	2025/2026	PA34, PA80, PH31, PH33, PH34,PH36-41
Ref.0326-07 Moray (Elgin GSP & Ashgrove PSS) – Page 14	2027/2028	AB36, IV30, IV31, IV32, IV36

Index of DNOA outcomes SEPD

1 Procure Flexibility Solutions *see below the DNOA Outcome Reports proposing flexibility opportunities*

DNOA outcome	Flexibility utilisation period	Indicative postcode areas
Ref.0326-10 Horndean and Clanfield (Horndean PSS) – Page 19	2027/2028 – 2029/2030 (2 years)	PO6-10,PO18, PO21
Ref.0326-11 Sherston and Luckington (Alderton PSS) – Page 20	2025/2026 – 2030/2031 (5 years)	GL8, GL9, SN14, SN16
Ref.0326-12 Slough (Chalvey BSP) – Page 21	2027/2028 – 2028/2029 (1 year)	SL1 – SL4, TW19.
Ref.0326-15 South Oxford (Cowley Local BSP), Scheme 3/3 – Page 24	2025/2026 – 2028/2029 (3 years)	OX15, OX1014, OX18, OX26, OX28, OX29, OX33, OX44, PO15, SP2, UM5
Ref.0326-16 South Portsmouth (Portsmouth BSP) – Page 25	2029/2030 – 2031/2032 (2 years)	PO1, PO11, PO12, PO13, PO2, PO20, PO3, PO4, PO5, PO6

2 Asset Solutions *see below the DNOA Outcome Reports proposing asset solutions only*

DNOA outcome	Capacity increase from	Indicative postcode areas
Ref.0326-13 South Oxford (Rose Hill PSS), Scheme 1/3 – Page 22	2030/2031	OX1, OX2, 0X26, OX28, OX3, OX33, OX4, OX44, PO15
Ref.0326-14 South Oxford (Cowley Local Main), Scheme 2/3 – Page 23	2033/2034	OX15, OX1014, OX18, OX26, OX28, OX29, OX33, OX44, PO15, SP2, UM5
Ref.0326-17 Waterlooville (Fort Widley BSP) - Page 26	2031/2032	PO2-3, PO6-10, PO16-17, PO20

DNOA OUTCOMES SHEPD

Aberdeenshire (Kintore and Skene PSS)

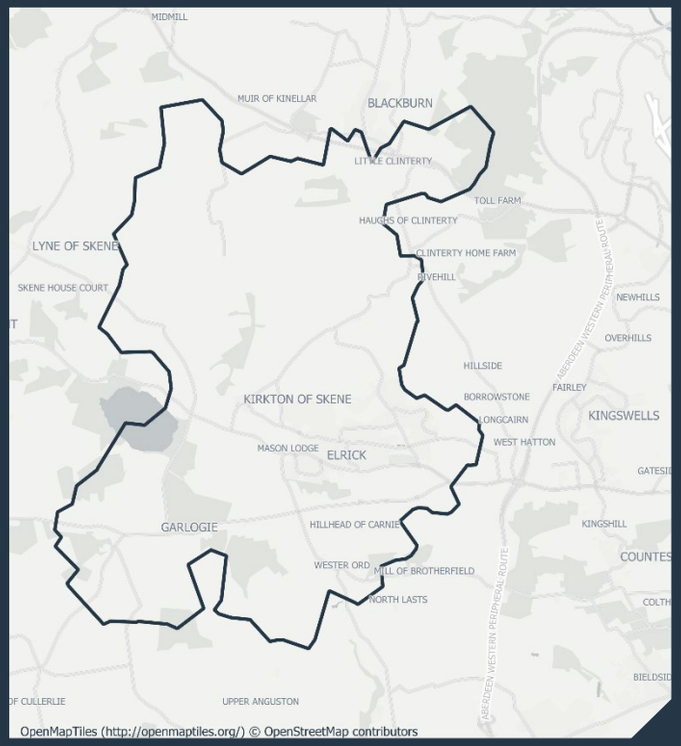
DNOA outcome: Asset Solution.

Scheme description

- The reinforcement of the Skene PSS will increase capacity in the Aberdeenshire council area. Postcode(s): AB11, AB13, AB15, AB21, AB32, AB51.
- Local authority: Aberdeenshire Council
- Load related – circuit thermal overload issues during FCO and intact conditions.

Proposed option

- Operational Management/Asset Solution: Reinforcement of the 33kV circuits between Kintore GSP and Skene PSS 33kV circuits.
- This option addresses the forecasted thermal overload on the circuit between Kintore GSP and Skene GSP out to 2050.
- Capacity released: 5.7MVA



Indicative flexibility price (if available)

Availability price: £ 108 /MW/h Utilisation price : £ 133 /MWh

System need requirement

J	F	M	A	M	J	J	A	S	O	N	D

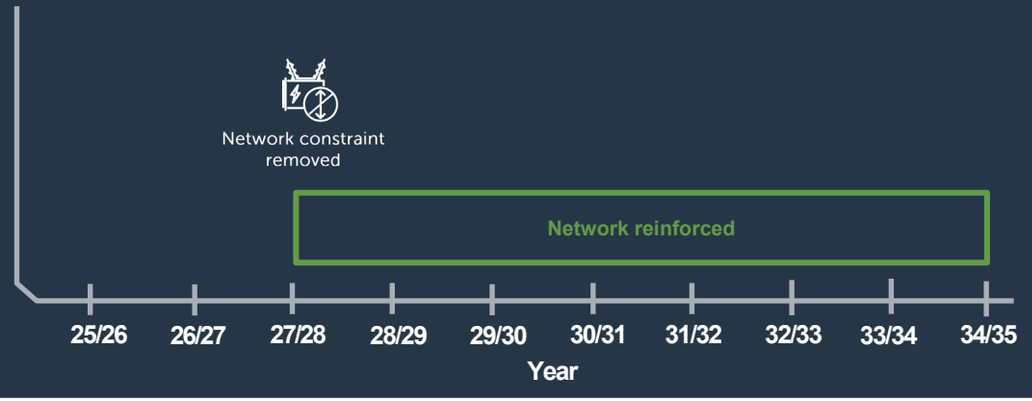
DNOA History

2024/25	2025/26	2026/27	2027/28	2028/29
	Initial assessment			

Estimated peak MW outside firm network capacity under each scenario

	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35
CT	-	-	(0.50)	(1.22)	(1.96)	(2.67)	(3.58)	(4.56)	(5.55)	(6.54)
ST	-	-	-	-	-	(0.15)	(0.55)	(0.98)	(1.45)	(1.98)
LTW	-	-	(1.10)	(1.85)	(2.78)	(3.81)	(4.76)	(5.75)	(6.76)	(7.71)
FS	-	-	-	-	-	-	-	(0.35)	(0.74)	(1.17)

Constraint management timeline



Drymen Aberfoyle (Strathleven GSP)

DNOA outcome: Smart Solution followed by Asset Solution.

Scheme description

- The reinforcement of the Strathleven GSP will increase capacity in the Drymen, Aberfoyle area. Postcode(s): FK8, G63, G83.
- Local authority: Stirling and West Dunbartonshire
- Load related – circuit thermal overload issues during FCO conditions due to forecasted demand growth.

Proposed option

- Smart/Asset Solution: Upgrade a section of one of the Strathleven 33kV feeder circuits.
- This option addresses the forecasted thermal overload issues on the Strathleven 304 circuit out to 2050.
- Capacity released: 3.84MVA

Indicative flexibility price (if available)

Availability price: £ 120 /MW/h Utilisation price : £ 155 /MWh

System need requirement

J	F	M	A	M	J	J	A	S	O	N	D

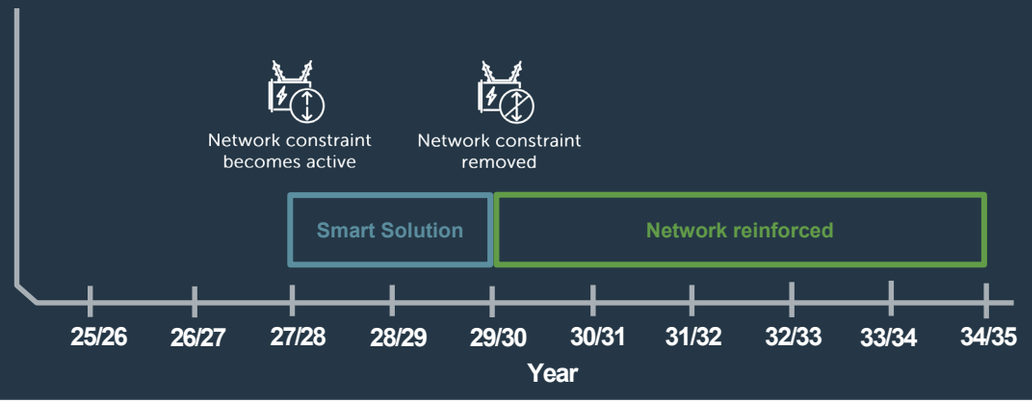
DNOA History

2024/25	2025/26	2026/27	2027/28	2028/29
	Initial assessment			

Estimated peak MW outside firm network capacity under each scenario

	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35
CT	-	-	0.46	1.48	(2.54)	(3.46)	(4.23)	(5.08)	(5.93)	(6.76)
ST	-	-	-	-	(0.19)	(0.62)	(1.15)	(1.63)	(2.15)	(2.73)
LTW	-	0.13	0.99	1.94	(3.04)	(4.13)	(4.92)	(5.75)	(6.57)	(7.38)
FS	-	-	-	-	-	-	(0.18)	(0.60)	(1.05)	(1.51)

Constraint management timeline



Fort William (Lochailort Regulator)

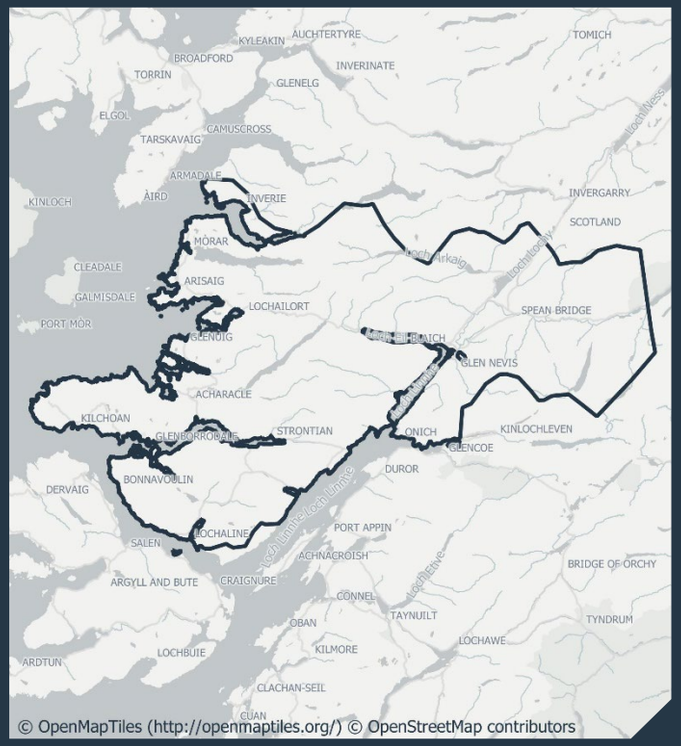
DNOA outcome: Asset Solution.

Scheme description

- The reinforcement of the Fort William 33kV network will increase capacity in the Fort William area. Postcode(s): PA34, PA80, PH31, PH33, PH34,PH3641.
- Local authority: Highland
- Load related – Circuit voltage issues during FCO conditions due to forecasted demand growth.

Proposed option

- Asset Solution: Installation of a new five panel 33kV board to facilitate the installation of two STATCOMs (voltage regulators).
- This option addresses the forecasted voltage issues on the 33kV network out to 2050.
- Capacity released: 1.5MVA



Indicative flexibility price (if available)

Availability price: £ N/A /MW/h Utilisation price : £ N/A /MWh

System need requirement

J	F	M	A	M	J	J	A	S	O	N	D

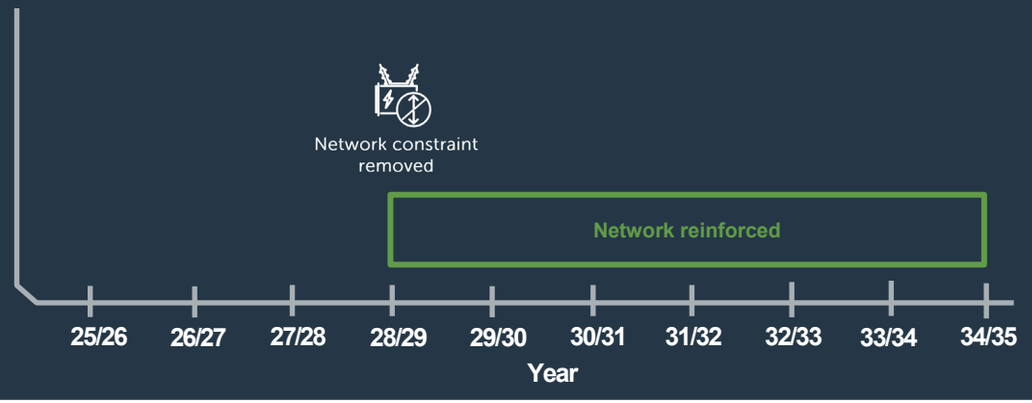
DNOA History

2024/25	2025/26	2026/27	2027/28	2028/29
	Initial assessment			

Estimated peak MW outside firm network capacity under each scenario

	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35
CT	-	-	-	-	-	-	-	-	-	-
ST	-	-	-	-	-	-	-	-	-	-
LTW	-	-	-	-	-	-	-	-	-	-
FS	-	-	-	-	-	-	-	-	-	-

Constraint management timeline



Fort William
(Fort William 33kV network)

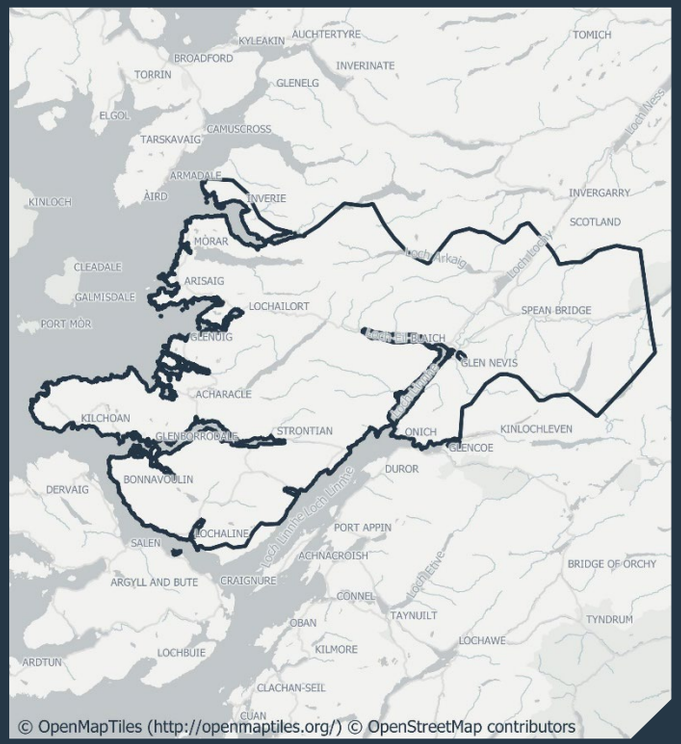
DNOA outcome: Asset Solution.

Scheme description

- The reinforcement of the Fort William 33kV network will increase capacity in the Fort William area. Postcode(s): PA34, PA80, PH31, PH33, PH34,PH3641.
- Local authority: Highland
- Load related – circuit thermal overload and voltage issues during FCO conditions due to forecasted demand growth.

Proposed option

- Asset Solution: Reinforce a section of 33kV circuit from Fort William GSP towards Pinegrove PSS.
- This option addresses the forecasted thermal overload and voltage issues on the reinforced circuit sections from Fort Williams to Pinegrove PSS out to 2050.
- Capacity released: 1.5MVA



Indicative flexibility price (if available)

Availability price: £ 110 /MW/h Utilisation price : £ 136 /MWh

System need requirement

J	F	M	A	M	J	J	A	S	O	N	D
■	■	■								■	■

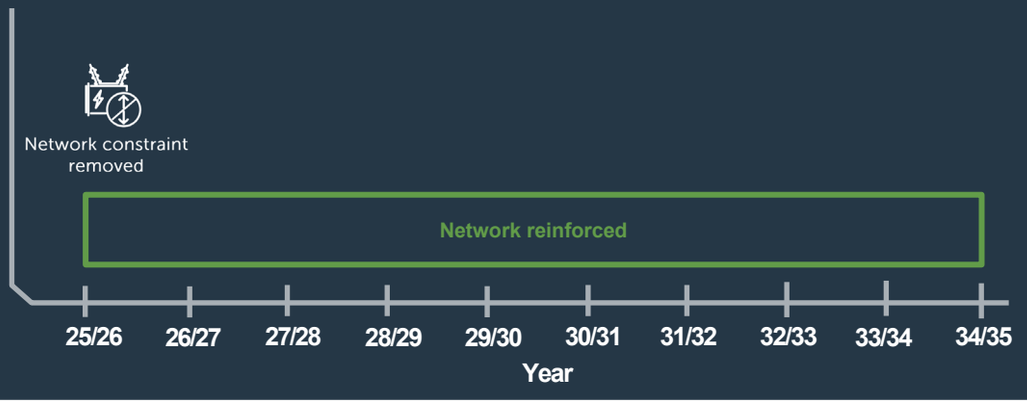
DNOA History

2024/25	2025/26	2026/27	2027/28	2028/29
	Initial assessment			

Estimated peak MW outside firm network capacity under each scenario

	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35
CT	(0.39)	(0.63)	(1.03)	(1.59)	(2.12)	(2.69)	(3.35)	(3.71)	(4.02)	(4.35)
ST	(0.34)	(0.46)	(0.70)	(0.94)	(1.17)	(1.41)	(1.66)	(1.92)	(2.22)	(2.49)
LTW	(0.35)	(0.65)	(1.09)	(1.57)	(2.04)	(2.65)	(3.33)	(3.76)	(4.32)	(4.80)
FS	(0.24)	(0.31)	(0.39)	(0.48)	(0.58)	(0.69)	(0.82)	(1.01)	(1.25)	(1.48)

Constraint management timeline



Inverlochy (Inverlochy PSS)

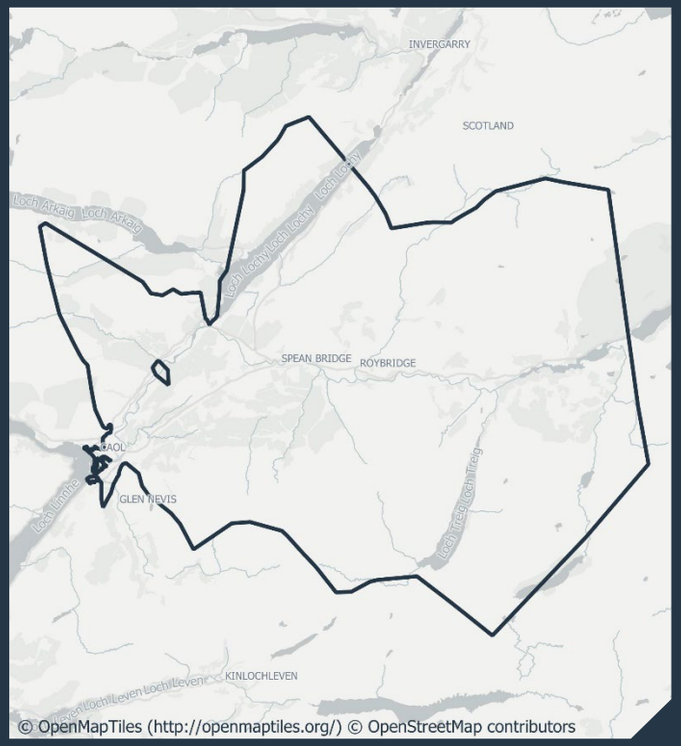
DNOA outcome: Smart Solution followed by Asset Solution.

Scheme description

- The reinforcement of the Inverlochy PSS will increase capacity in the Inverlochy area. Postcode(s): PH31, PH33, PH34.
- Local authority: Highland
- Load related – substation and circuit thermal overload during FCO conditions due to forecasted demand growth.

Proposed option

- Smart/Asset Solution: Flexibility utilised for 2 years, lay new 33kV circuits from Fort William GSP to Inverlochy PSS and reinforce the two existing 33/11kV transformers.
- This option addresses the forecasted thermal overload and voltage issues at Inverlochy PSS out to 2050.
- Capacity released: 15MVA



Indicative flexibility price (if available)

Availability price: £ 108 /MW/h Utilisation price : £ 133 /MWh

System need requirement

J	F	M	A	M	J	J	A	S	O	N	D
■	■	■								■	■

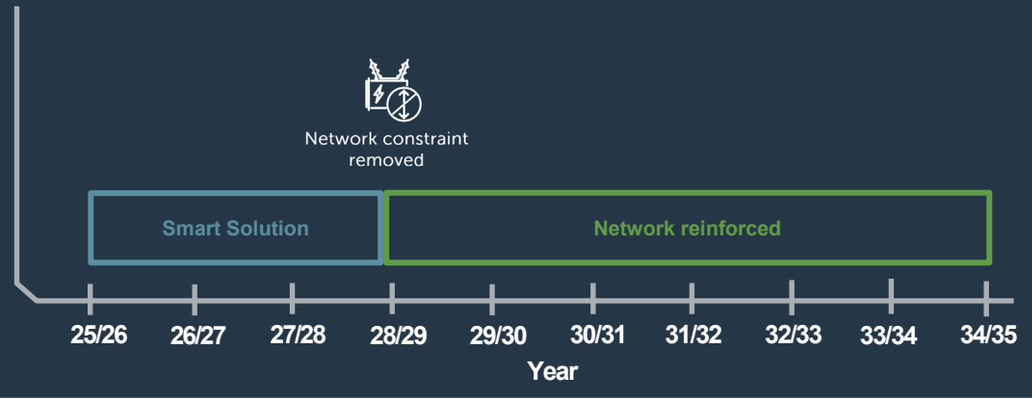
DNOA History

2024/25	2025/26	2026/27	2027/28	2028/29
	Initial assessment			

Estimated peak MW outside firm network capacity under each scenario

	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35
CT	0.17	0.81	1.49	(2.12)	(2.77)	(3.41)	(3.73)	(4.11)	(4.48)	(4.84)
ST	-	-	0.13	(0.33)	(0.61)	(0.89)	(1.22)	(1.58)	(1.97)	(2.38)
LTW	0.54	1.02	1.51	(1.98)	(2.59)	3.25	3.66	4.07	4.50	4.89
FS	-	-	-	(0.16)	(0.35)	(0.58)	(0.82)	(1.11)	(1.38)	(1.70)

Constraint management timeline



Moray (Dufftown PSS)

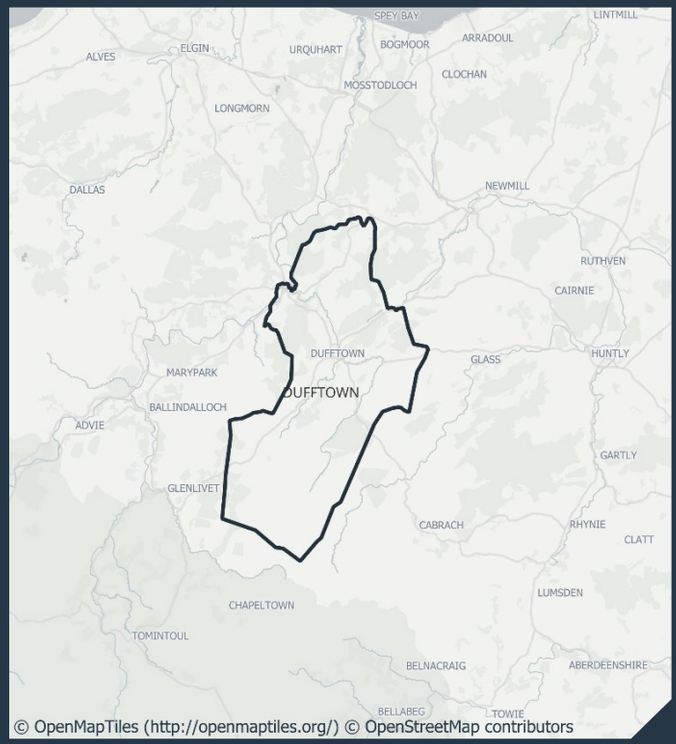
DNOA outcome: Flexibility followed by Asset Solution.

Scheme description

- The reinforcement of the Dufftown PSS will increase capacity in the Moray area. Postcode(s): AB38, AB55
- Local authority: Moray Council
- Load related – substation overload/ during FCO conditions due to forecasted demand growth.

Proposed option

- Flexibility/Asset Solution: Flexibility utilised for 2 years followed by reinforcement of Dufftown PSS transformers, underground cables and 33kV circuits in 2029/30.
- This option addresses the forecasted thermal overload and voltage issues at Dufftown PSS out to 2050.
- Capacity released: 8.5MVA



Indicative flexibility price (if available)

Availability price: £ 112 /MW/h Utilisation price : £ 144 /MWh

System need requirement

J	F	M	A	M	J	J	A	S	O	N	D

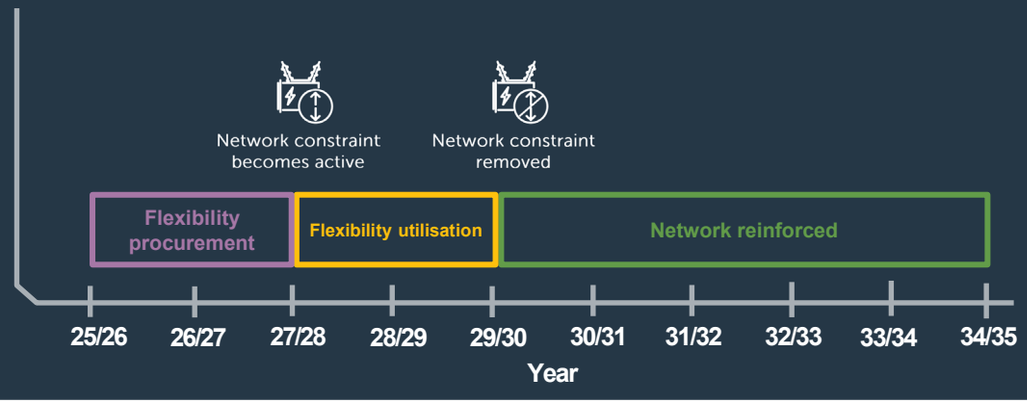
DNOA History

2024/25	2025/26	2026/27	2027/28	2028/29
	Initial assessment			

Estimated peak MW outside firm network capacity under each scenario

	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35
CT	-	-	0.33	2.30	(4.39)	(5.07)	(5.46)	(5.84)	(6.20)	(6.59)
ST	-	0.61	1.69	2.43	(4.85)	(5.58)	(6.14)	(6.40)	(6.65)	(7.00)
LTW	-	1.01	2.98	6.80	(10.86)	(13.29)	(13.95)	(14.64)	(15.23)	(15.88)
FS	-	-	-	0.12	(0.53)	(0.90)	(1.13)	(1.30)	(1.49)	(1.69)

Constraint management timeline



Moray
(Elgin GSP & Ashgrove PSS)

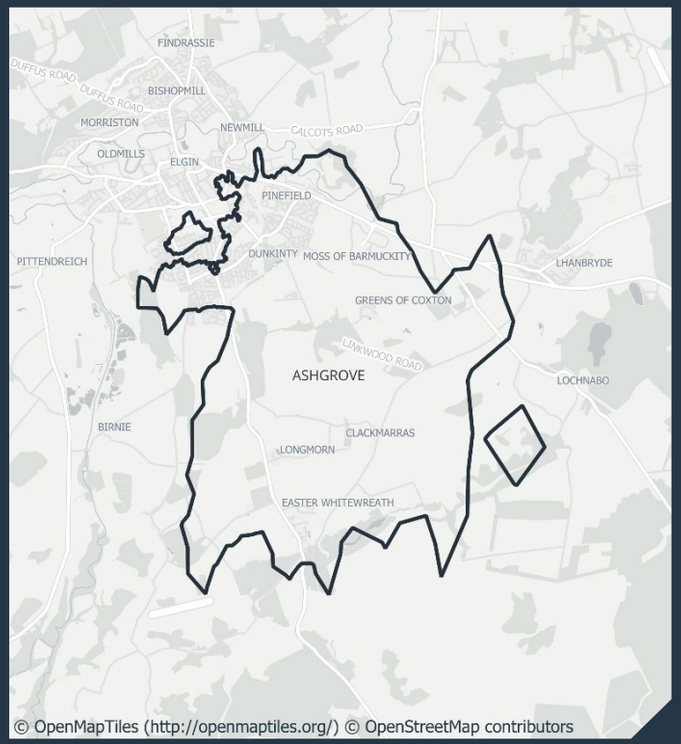
DNOA outcome: Asset Solution.

Scheme description

- The reinforcement of the Elgin GSP & Ashgrove PSS will increase capacity in the Ashgrove area. Postcode(s): AB36, IV30, IV31, IV32, IV36.
- Local authority: Moray Council
- Load related – circuit thermal overload and voltage issues during FCO conditions due to forecasted demand growth..

Proposed option

- Asset Solution: Reinforcement of 33kV circuits 2027/28.
- This option addresses the forecasted thermal overload and voltage issues at Elgin GSP and Ashgrove PSS out to 2050.
- Capacity released: 24.1MVA



Indicative flexibility price (if available)

Availability price: £ 110 /MW/h Utilisation price : £ 138 /MWh

System need requirement

J	F	M	A	M	J	J	A	S	O	N	D

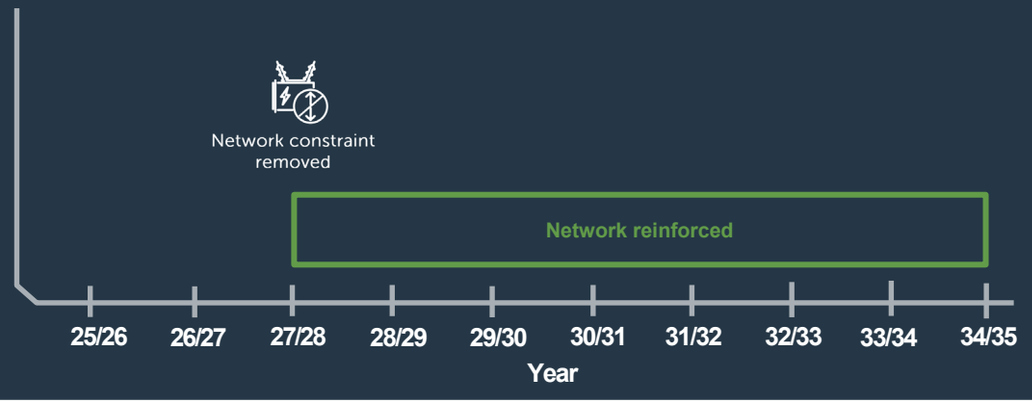
DNOA History

2024/25	2025/26	2026/27	2027/28	2028/29
	Initial assessment			

Estimated peak MW outside firm network capacity under each scenario

	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35
CT	-	-	(1.06)	(2.47)	(3.87)	(5.58)	(7.13)	(8.94)	(10.40)	(11.87)
ST	-	-	-	(0.64)	(1.59)	(2.84)	(3.93)	(5.20)	(6.15)	(7.16)
LTW	-	0.57	(1.99)	(3.45)	(4.94)	(6.85)	(8.40)	(10.14)	(11.60)	(13.04)
FS	-	-	-	(0.64)	(1.59)	(2.84)	(3.93)	(5.20)	(6.15)	(7.16)

Constraint management timeline



Muir of Ord
(Muir of Ord PSS and North Kessock PSS)

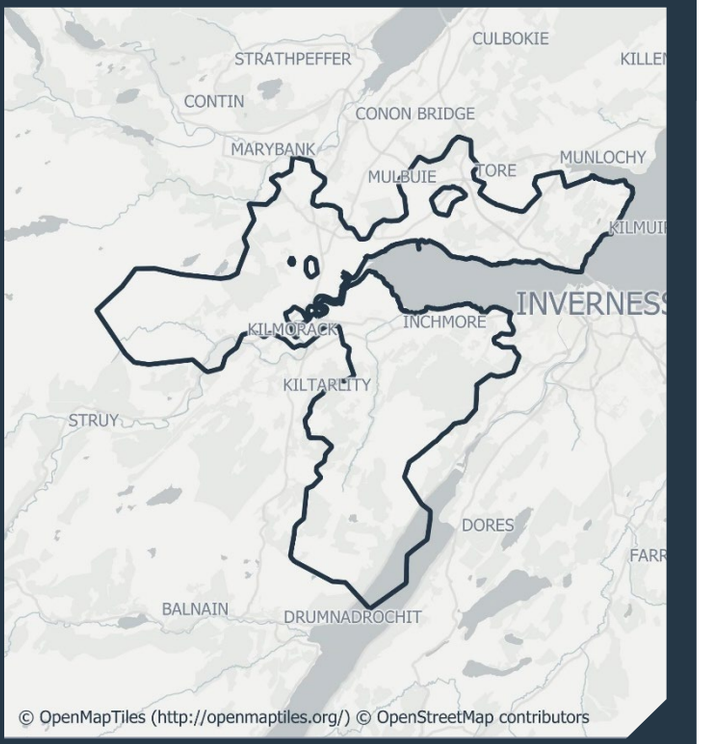
DNOA outcome: Flexibility followed by Asset Solution.

Scheme description

- The reinforcement of the Muir of Ord PSS and North Kessock PSS circuits will increase capacity in the Muir of Ord area. Postcode(s): AB23, IV1, IV2, IV24, IV3, IV4, IV5, IV6, IV7, IV8.
- Local authority: Highland Council.
- Load related – substation/circuit thermal overload and voltage issues during FCO/SCO/intact conditions due to forecasted demand growth.

Proposed option

- Flexibility/Asset Solution: Flexibility utilised for 3 years followed by the reinforcement of 33kV circuits between Beauly GSP and Muir of Ord and North Kessock PSSs in 2030/31 .
- This option addresses the forecasted thermal overload on the Muir of Ord and North Kessock 33kV circuits out to 2050.
- Capacity released: 6MVA



Indicative flexibility price (if available)

Availability price: £ 150 /MW/h Utilisation price : £ 200 /MWh

System need requirement

J	F	M	A	M	J	J	A	S	O	N	D
■	■	■								■	■

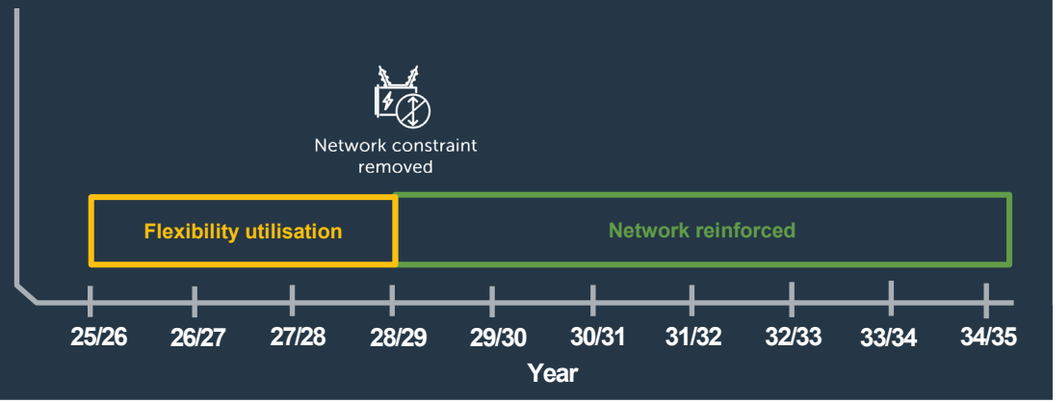
DNOA History

2024/25	2025/26	2026/27	2027/28	2028/29
	Initial assessment			

Estimated peak MW outside firm network capacity under each scenario

	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35
CT	1.6	2.3	3.1	(3.9)	(4.8)	(5.6)	(6.3)	(7.0)	(7.6)	(8.3)
ST	1.2	1.7	2.1	(2.4)	(3.0)	(3.5)	(4.0)	(4.4)	(4.9)	(5.5)
LTW	2.1	2.9	3.8	(4.8)	(5.9)	(7.1)	(7.8)	(8.5)	(9.2)	(9.9)
FS	1	1.3	1.6	(1.9)	(2.2)	(2.5)	(2.9)	(3.3)	(3.7)	(4.2)

Constraint management timeline



Orkney (Finstown GSP)

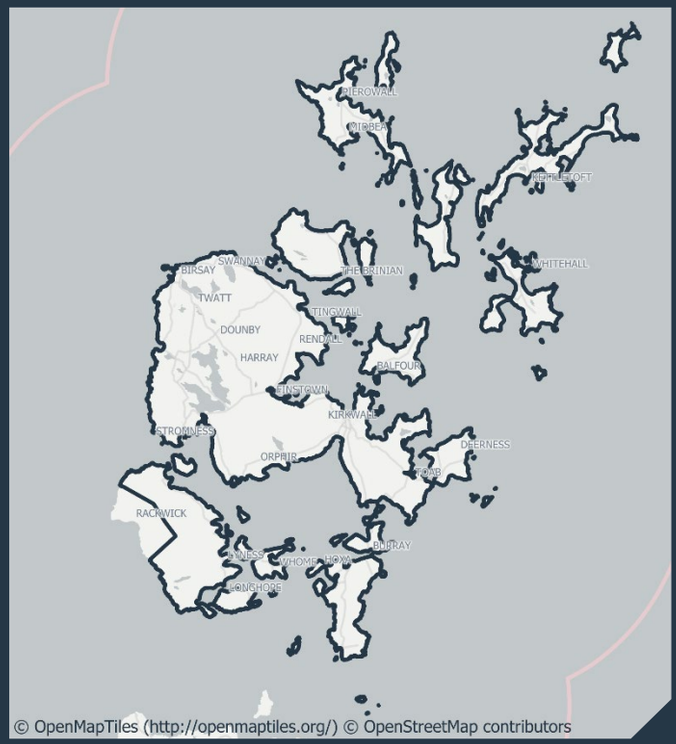
DNOA outcome: Smart Solution and Asset Solution.

Scheme description

- The reinforcement of the Finstown GSP will increase capacity in the Orkney Islands council area. Postcode(s): KW15, KW16, KW17
- Local authority: Orkney Island Council
- Load related – circuit thermal overload and voltage issues during FCO conditions due to forecasted demand growth.

Proposed option

- Operational Management/Asset Solution: Installation of a new 33kV distribution switchboard at Finstown. Reinforcement of Scorrodale and Kirkwall 33kV circuits along with reconfiguration.
- This option addresses the forecasted thermal overload and voltage issues at Finstown GSP out to 2050.
- Capacity released: 61.06MVA



Indicative flexibility price (if available)

Availability price: £ NA /MW/h Utilisation price : £ N/A /MWh

System need requirement

J	F	M	A	M	J	J	A	S	O	N	D

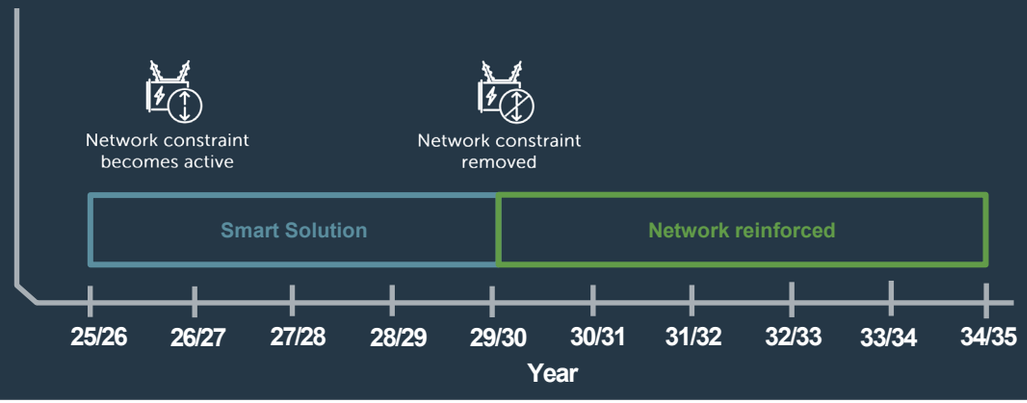
DNOA History

2024/25	2025/26	2026/27	2027/28	2028/29
	Initial assessment			

Estimated peak MW outside firm network capacity under each scenario

	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35
CT	-	0.07	1.07	2.60	(4.51)	(8.14)	(11.06)	(12.66)	(14.70)	(16.83)
ST	-	-	0.87	2.97	(4.42)	(8.78)	(11.72)	(13.59)	(15.29)	(18.22)
LTW	-	0.05	1.63	4.05	(5.48)	(9.94)	(12.67)	(14.30)	(15.72)	(17.93)
FS	-	-	-	-	(0.48)	(3.10)	(5.38)	(6.44)	(7.37)	(8.86)

Constraint management timeline



DNOA OUTCOMES REVIEW SHEPD

Outcome ID	Outcome name	March 2025 outcome decision	Updated position
Ref 012501	Banchory (Banchory PSS / Circuits)	Flexibility/Asset Solution	Flexibility requirements unchanged.
Ref 012502	Kirkwall (Kirkwall PSS & Hatston PSS – New Site)	Asset Solution	Project delivery recommends operational management for one year to ensure capacity availability.
Ref 012503	St Marys, Burray, & South Ronaldsay (St Marys PSS)	Asset Solution	Project delivery remains unchanged.
Ref 012504	Stornoway (Barvas PSS)	Flexibility/Asset Solution	Flexibility requirements unchanged.
Ref 012505	Stornoway (Coll PSS)	Smart Solution/Asset Solution	Smart and Asset Solution remains unchanged.

DNOA OUTCOMES SEPD

Horndean and Clanfield (Horndean PSS)

DNOA outcome: Flexibility followed by Asset Solution.

Scheme description

- The reinforcement of the Horndean PSS will increase capacity in the Horndean and Clanfield area. Postcode(s): PO610,PO18, PO21.
- Local authority: East Hampshire, Winchester, Havant, and Chichester.
- Load related – substation thermal overload issues during FCO conditions due to forecasted demand growth.

Proposed option

- Flexibility/Asset Solution: Flexibility utilised for 2 years, followed by asset reinforcement of installing an additional 33/11kV transformer, 33kV and 11kV indoor switchboard at Horndean.
- This option addresses the forecasted thermal overload issues at Horndean PSS out to 2050.
- Capacity released: 30MVA

Indicative flexibility price (if available)

Availability price: £ 119 /MW/h Utilisation price : £ 154 /MWh

System need requirement

J	F	M	A	M	J	J	A	S	O	N	D

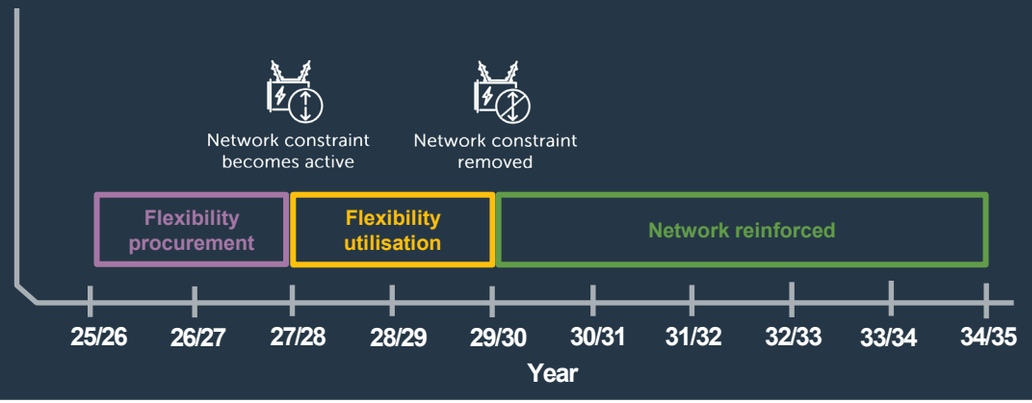
DNOA History

2024/25	2025/26	2026/27	2027/28	2028/29
	Initial assessment			

Estimated peak MW outside firm network capacity under each scenario

	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35
CT	-	-	0.7	2.0	(3.3)	(4.9)	(7.5)	(10.0)	(12.2)	(14.8)
ST	-	-	-	-	-	-	(0.7)	(1.5)	(2.5)	(3.5)
LTW	-	1.2	2.7	4.1	(6.0)	(8.0)	(10.4)	(12.9)	(15.4)	(17.4)
FS	-	-	-	-	-	-	(0.3)	(1.1)	(2.0)	(2.9)

Constraint management timeline



Sherston and Luckington (Alderton PSS)

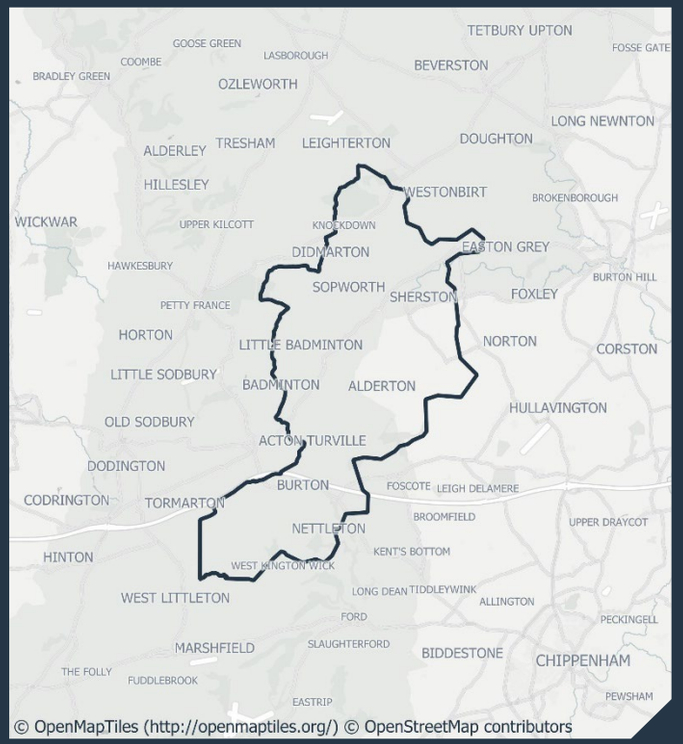
DNOA outcome: Flexibility followed by Asset Solution.

Scheme description

- The reinforcement of the Alderton PSS will increase capacity in the Sherston and Luckington area. Postcode(s): GL8, GL9, SN14, SN16.
- Local authority: Wiltshire.
- Load related – substation thermal overload during FCO conditions due to forecasted demand growth.

Proposed option

- Flexibility/Asset Solution: Flexibility utilised for 5 years, followed by asset reinforcement of installation two new 7.5/15MVA and 33/11kV transformers.
- This option addresses the forecasted thermal issues at Alderton PSS out to 2050.
- Capacity released: 4.5MVA



Indicative flexibility price (if available)

Availability price: £ 150 /MW/h Utilisation price : £ 200 /MWh

System need requirement

J	F	M	A	M	J	J	A	S	O	N	D
■	■	■	■					■	■	■	■

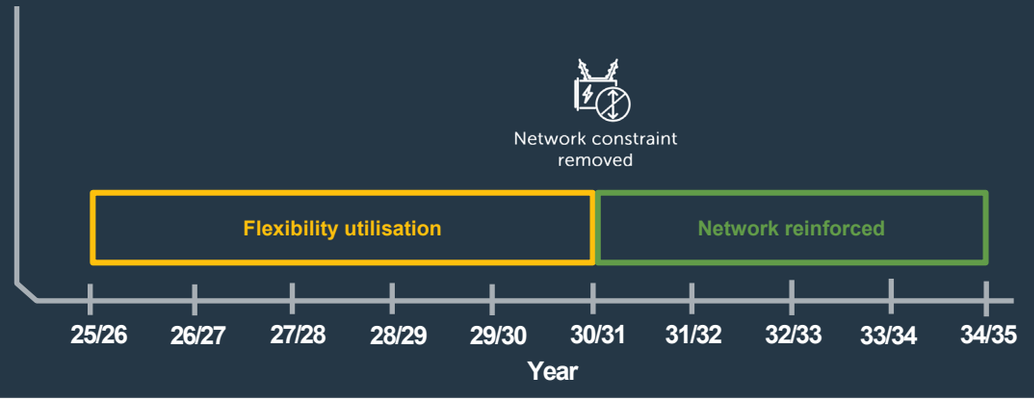
DNOA History

2024/25	2025/26	2026/27	2027/28	2028/29
	Initial assessment			

Estimated peak MW outside firm network capacity under each scenario

	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35
CT	3.3	3.4	3.5	3.7	3.8	(4.0)	(4.3)	(4.5)	(4.8)	(4.9)
ST	3.2	3.3	3.4	3.5	3.7	(3.8)	(4.0)	(4.2)	(4.4)	(4.6)
LTW	3.4	3.5	3.7	3.8	3.9	(4.1)	(4.3)	(4.5)	(4.8)	(4.8)
FS	3.2	3.2	3.2	3.3	3.4	(3.5)	(3.7)	(3.8)	(4.0)	(4.1)

Constraint management timeline



Slough (Chalvey BSP)

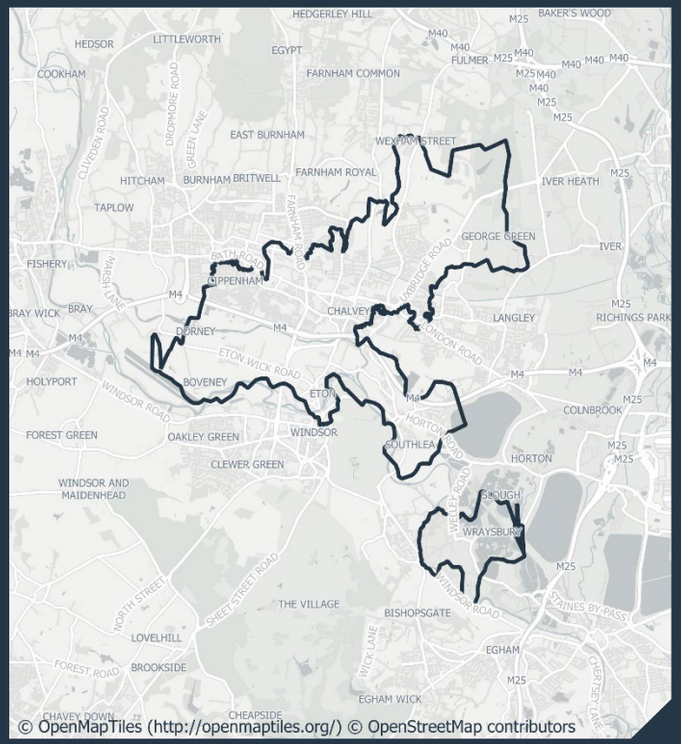
DNOA outcome: Flexibility followed by Asset Solution.

Scheme description

- The reinforcement of the Chalvey BSP will increase capacity in the Slough area. Postcode(s): SL1 – SL4, TW19.
- Local authority: Buckinghamshire, Slough, Windsor and Maidenhead.
- Load related – substation thermal overload during FCO conditions due to forecasted demand growth.

Proposed option

- Flexibility/Asset Solution: Flexibility utilised for a year followed by the construction of a new BSP in the Cippenham BSP compound. Then transfer of Herschel Street PSS and Petersfield Avenue PSS from Chalvey BSP to the new BSP.
- This option addresses the forecasted thermal overload at Chalvey BSP out to 2050.
- Capacity released: 50MVA



Indicative flexibility price (if available)

Availability price: £ 125 /MW/h Utilisation price : £ 175 /MWh

System need requirement

J	F	M	A	M	J	J	A	S	O	N	D

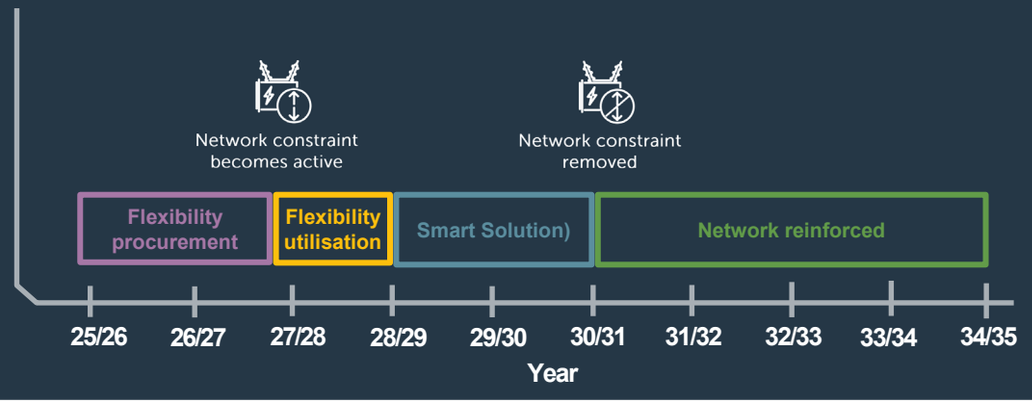
DNOA History

2024/25	2025/26	2026/27	2027/28	2028/29
	Initial assessment			

Estimated peak MW outside firm network capacity under each scenario

	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35
CT	-	-	60.60	(66.32)	(72.59)	(78.81)	(86.37)	(93.28)	(98.85)	(104.86)
ST	-	-	54.93	(58.27)	(62.21)	(65.81)	(69.15)	(72.33)	(75.43)	(78.86)
LTW	-	-	64.92	(71.10)	(78.70)	(85.82)	(92.98)	(99.94)	(106.56)	(111.40)
FS	-	-	54.78	(57.89)	(61.44)	(64.93)	(68.37)	(71.53)	(74.36)	(77.63)

Constraint management timeline



South Oxford (Rose Hill PSS), Scheme 1/3

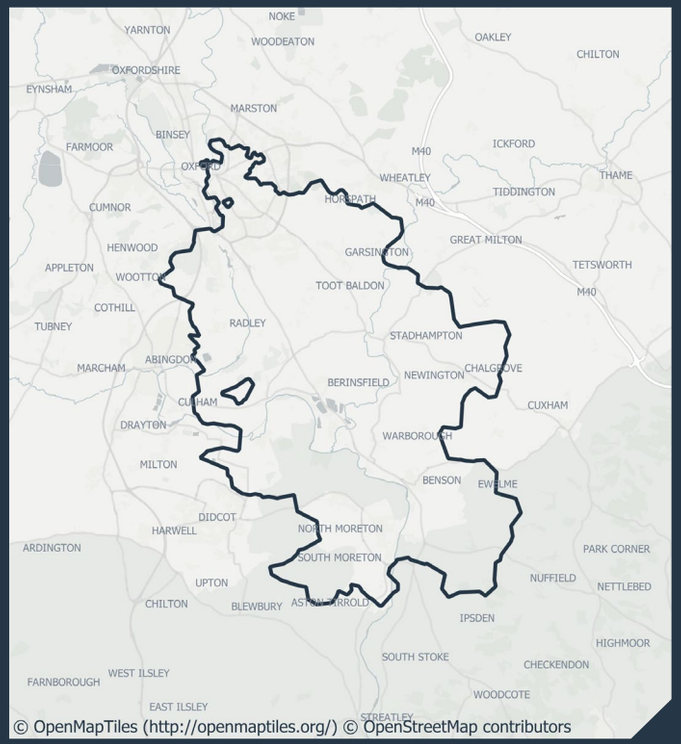
DNOA outcome: Asset Solution.

Scheme description

- The reinforcement of Rose Hill PSS transformer and circuits will increase capacity in the South Oxfordshire area. Postcode(s): OX1, OX2, 0X26, OX28, OX3, OX33, OX4, OX44, PO15.
- Local authority: South Oxfordshire, Oxford.
- Load and thermal related – substation and circuit overload during FCO conditions due to forecasted demand growth.

Proposed option

- Asset Solution: Upgrade transformer and circuit between Rose Hill PSS and Cowley Local BS.
- This option addresses the forecasted thermal overload at Rose Hill out to 2050.
- Capacity released: 41.3MVA



Indicative flexibility price (if available)

Availability price: £ 150 /MW/h Utilisation price : £ 200 /MWh

System need requirement

J	F	M	A	M	J	J	A	S	O	N	D

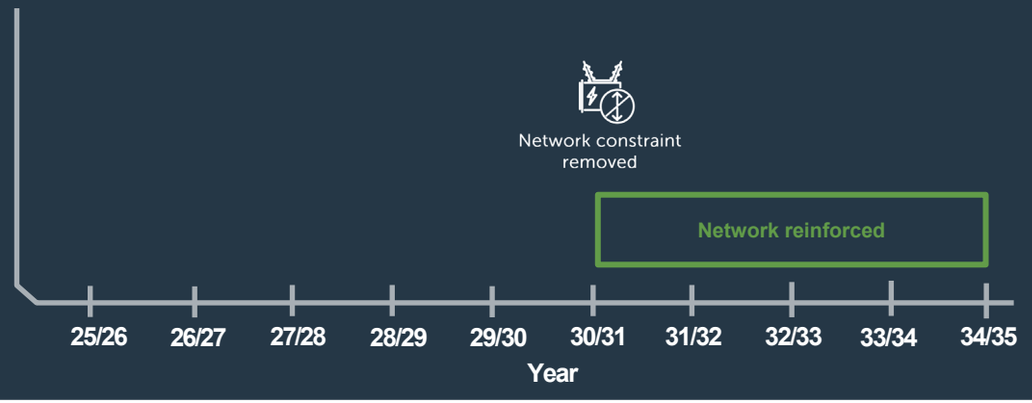
DNOA History

2024/25	2025/26	2026/27	2027/28	2028/29
	Initial assessment			

Estimated peak MW outside firm network capacity under each scenario

	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35
CT *	7.64	7.06	5.49	4.61	4.02	(-0.78)	(-2.84)	(-6.17)	(-7.84)	(-9.41)
ST *	7.74	7.25	5.78	5.00	4.61	(-0.29)	(-2.25)	(-5.49)	(-6.66)	(-7.94)
LTW*	7.74	7.25	5.49	4.90	4.51	(-0.59)	(-2.65)	(-6.17)	(-7.35)	(-8.72)
FS*	7.84	7.45	6.17	5.78	5.59	0.98	(-0.59)	(-2.65)	(-3.53)	(-4.21)

Constraint management timeline



South Oxford (Cowley Local Main), Scheme 2/3

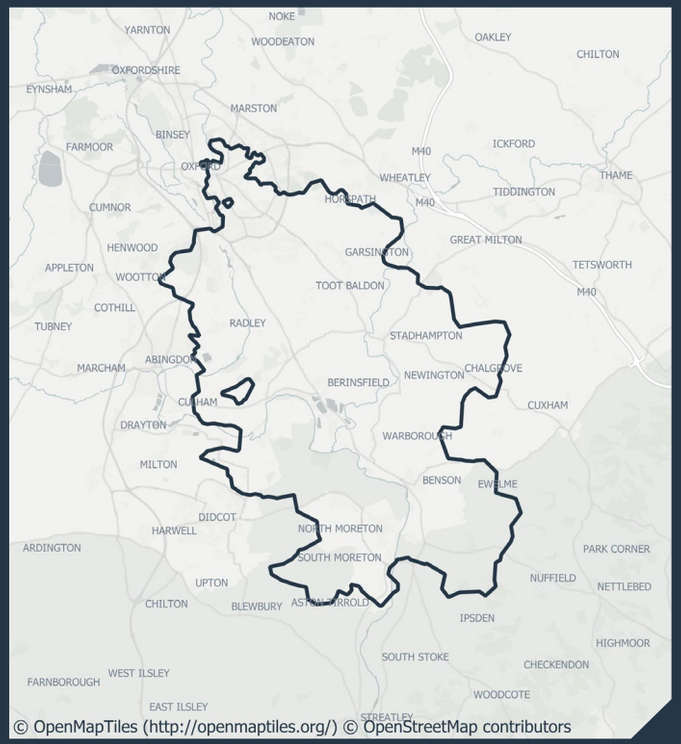
DNOA outcome: Asset Solution.

Scheme description

- The reinforcement of Cowley Local BSP circuits will increase capacity in the South Oxfordshire area. Postcode(s): OX(15), OX(1014), OX18, OX26, OX28, OX29, OX33, OX44, PO15, SP2, UM5.
- Local authority: South Oxfordshire, Oxford.
- Load and thermal related – substation overload during FCO conditions due to forecasted demand growth.

Proposed option

- Asset Solution: Add new transformer at Cowley Local Main.
- This option addresses the forecasted thermal overload at Cowley Local BSP out to 2050.
- Capacity released: 90MVA



Indicative flexibility price (if available)

Availability price: £ 150 /MW/h Utilisation price : £ 200 /MWh

System need requirement

J	F	M	A	M	J	J	A	S	O	N	D

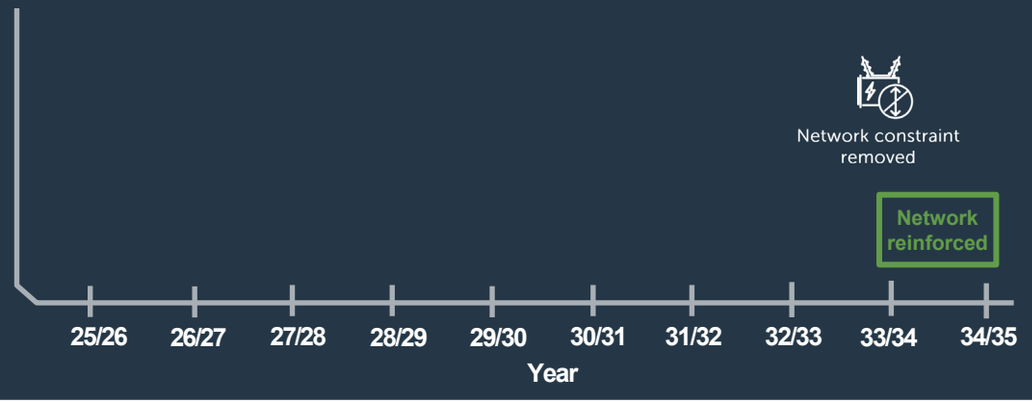
DNOA History

2024/25	2025/26	2026/27	2027/28	2028/29
	Initial assessment			

Estimated peak MW outside firm network capacity under each scenario

	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35
CT*	40.08	33.22	25.87	21.07	18.82	11.76	5.88	0.00	(-4.90)	(-10.78)
ST*	40.67	34.01	27.15	22.54	20.78	13.72	8.82	3.92	0.00	(-4.90)
LTW*	40.77	34.20	26.56	22.34	20.68	12.74	8.82	1.96	(-1.96)	(-6.86)
FS*	40.96	34.79	28.52	24.99	24.11	17.84	14.70	12.74	10.78	7.84

Constraint management timeline



South Oxford (Cowley Local BSP), Scheme 3/3

DNOA outcome: Smart Solution followed by Asset Solution.

Scheme description

- The reinforcement of Cowley Local BSP circuits will increase capacity in the South Oxfordshire area. Postcode(s): OX(15), OX(1014), OX18, OX26, OX28, OX29, OX33, OX44, PO15, SP2, UM5.
- Local authority: South Oxfordshire, Oxford.
- Load and thermal related – circuit overload during FCO conditions due to forecasted demand growth.

Proposed option

- Smart/Asset Solution: Add third 132kV circuit between Cowley GSP and Cowley Local BSP.
- This option addresses the forecasted thermal overload at Cowley Local BSP out to 2050.
- Capacity released: 201MVA

Indicative flexibility price (if available)

Availability price: £ 150 /MW/h Utilisation price : £ 200 /MWh

System need requirement

J	F	M	A	M	J	J	A	S	O	N	D

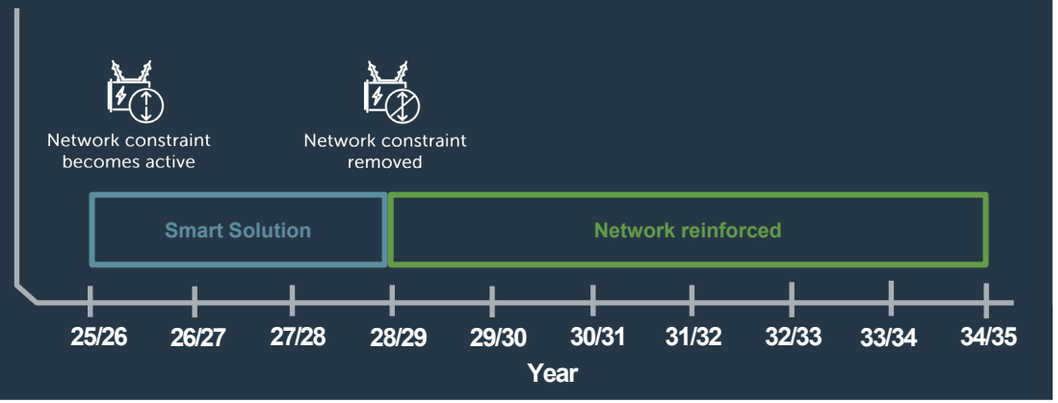
DNOA History

2024/25	2025/26	2026/27	2027/28	2028/29
	Initial assessment			

Estimated peak MW outside firm network capacity under each scenario

	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35
CT*	93.1	76.44	26.46	19.6	15.68	(-1.96)	(-11.76)	(-21.56)	(-31.36)	(-43.12)
ST*	94.08	78.4	27.44	21.56	16.66	(-0.98)	(-132.3)	(-23.52)	(-33.32)	(-49.98)
LTW*	94.08	78.4	27.44	21.56	16.66	(-0.98)	(-11.76)	(-23.52)	(-34.3)	(-43.12)
FS*	94.08	79.38	29.4	25.48	22.54	6.86	0	(-4.9)	-(10.78)	(-16.66)

Constraint management timeline



South Portsmouth (Portsmouth BSP)

DNOA outcome: Flexibility followed by Asset Solution.

Scheme description

- The reinforcement of the Portsmouth BSP will increase capacity in the South Portsmouth area. Postcode(s): PO1, PO11, PO12, PO13, PO2, PO20, PO3, PO4, PO5, PO6.
- Local authority: Portsmouth.
- Load related – substation thermal overload issues during FCO conditions due to forecasted demand growth.

Proposed option

- Flexibility/Asset Solution: Flexibility utilised for 2 years followed by the installation of an additional 132/33kV transformer and 132kV circuit to supply it.
- This option addresses the forecasted thermal overload and voltage issues at Portsmouth BSP out to 2050.
- Capacity released: 90MVA.

Indicative flexibility price (if available)

Availability price: £ 150 /MW/h Utilisation price : £ 200 /MWh

System need requirement

J	F	M	A	M	J	J	A	S	O	N	D

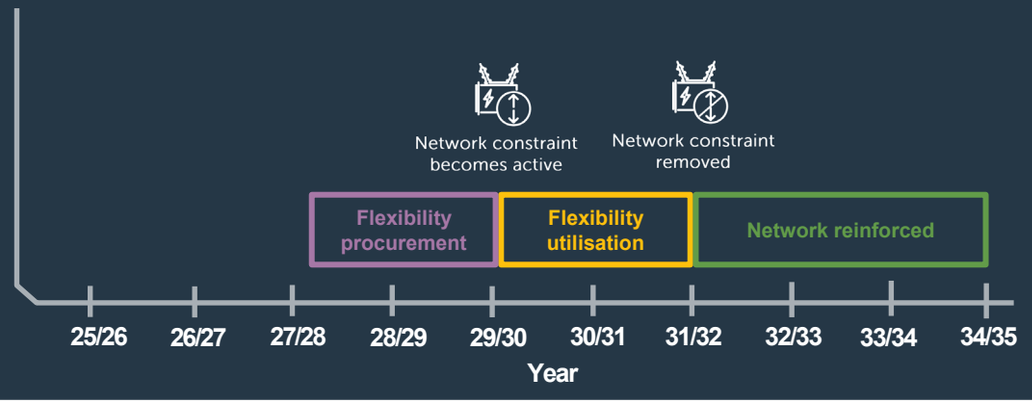
DNOA History

2024/25	2025/26	2026/27	2027/28	2028/29
	Initial assessment			

Estimated peak MW outside firm network capacity under each scenario

	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35
CT	-	-	-	-	1.2	5.2	(10.5)	(15.6)	(20.0)	(25.0)
ST	-	-	-	-	-	-	-	-	-	(0.1)
LTW	-	-	-	2.7	7.1	11.9	(17.0)	(22.1)	(27.4)	(31.3)
FS	-	-	-	-	-	-	-	-	-	(4.8)

Constraint management timeline



Waterlooville (Fort Widley BSP)

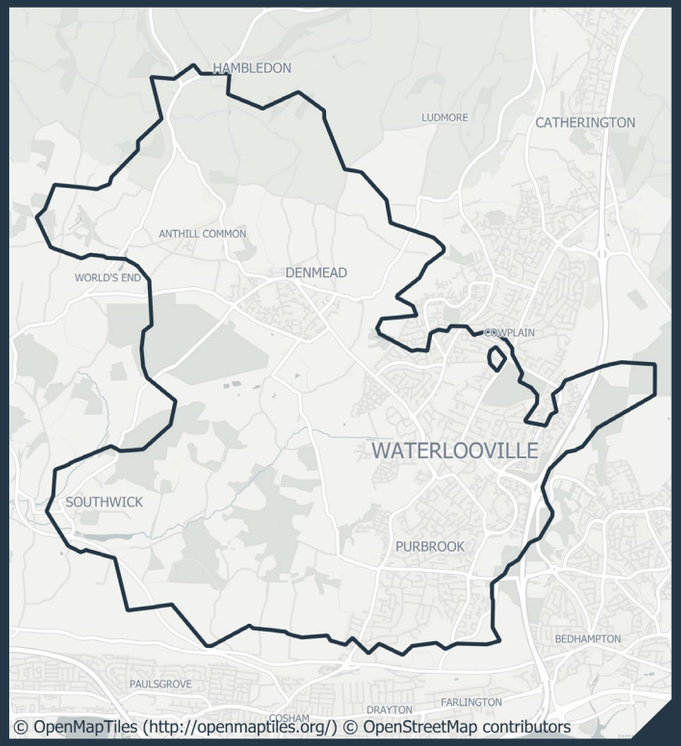
DNOA outcome: Asset Solution.

Scheme description

- The reinforcement of the Fort Widley BSP will increase capacity in the Waterlooville area. Postcode(s): PO2-3, PO6-10, PO16-17, PO20.
- Local authority: East Hampshire, Winchester, Havant, and Chichester.
- Load related – substation thermal overload issues during FCO conditions due to forecasted demand growth.

Proposed option

- Asset Solution: Reinforcement of two existing 132/33kV transformers at Fort Widley BSP.
- This option addresses the forecasted thermal overload issues at Fort Widley BSP out to 2050.
- Capacity released: 30MVA



Indicative flexibility price (if available)

Availability price: £ 116 /MW/h Utilisation price : £ 147 /MWh

System need requirement

J	F	M	A	M	J	J	A	S	O	N	D

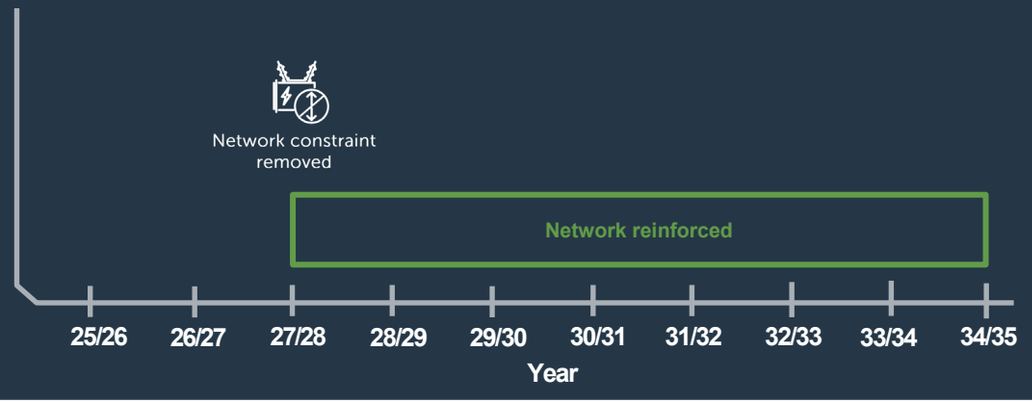
DNOA History

2024/25	2025/26	2026/27	2027/28	2028/29
	Initial assessment			

Estimated peak MW outside firm network capacity under each scenario

	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35
CT	-	-	-	1.8	5.3	9.4	15.9	22.2	27.2	33.0
ST	-	-	-	-	-	-	0.3	2.7	5.1	7.6
LTW	-	-	3.1	6.7	11.3	16.2	22.3	28.4	34.2	38.5
FS	-	-	-	-	-	-	-	1.0	3.2	5.4

Constraint management timeline



DNOA OUTCOMES REVIEW SEPD

Outcome ID	Outcome name	March 2025 outcome decision	Updated position
Ref 012506	East Dorset and South Wiltshire (Mannington GSP)	Asset Solution	Project delivery remains unchanged.
Ref 012507	Faringdon (Faringdon PSS)	Asset Solution	Project delivery remains unchanged.
Ref 012508	Portsmouth, Chichester & Surrounding Area (Lovedean GSP)	Asset Solution	Project delivery remains unchanged.
Ref 012509	Southampton City Centre (Chapel PSS)	Flexibility/Asset Solutions	Project delivery remains unchanged.
Ref 012510	Wallingford (Wallingford PSS)	Flexibility/Asset Solutions	Project delivery remains unchanged.
Ref 012511	Watlington (Watlington PSS)	Flexibility/Asset Solutions	Project delivery remains unchanged.

Glossary

Term	Description
Aggregators	A new type of energy service provider which can increase or moderate the electricity consumption of a group of consumers according to total electricity demand on the grid.
BSP	Bulk Supply Point.
CMZ	Constraint Managed Zones . These zones make use of technologies providing flexibility to alleviate network constraints, deploying them as an alternative to traditional network reinforcement in the management of peak demand.
Data triage	Systematically find issues which should inhibit open data, identify the 'least impact' mitigation technique(s) and make the process transparent.
Decarbonisation	Reducing the carbon intensity in terms of emissions per unit of electricity generated.
DER	Distributed Energy Resources. Any resource on the distribution system that produces or stores electricity. This can include distributed generation, storage, heat pumps and electric vehicles as well as other technologies.
Digital System Map/ Digital Twin	A digital representation of a realworld entity or system.
DNO	Distribution Network Operator
DNOA	Distribution Network Options Assessment
DSO	Distribution Systems Operator. The directorate within SSEN that supports a more flexible network operation. Uniquely placed to ensure simple and consistent access to new markets for our active customers through maximising the utilisation of our existing electrical and communication networks.
DSOAB	DSO Advisory Board
DSAP	Digital Strategy and Action Plan
FCO	First Circuit Outage. Conditions following loss of a circuit from the intact network.
FSO	Future System Operator. Ofgem intend to set up an expert, independent FSO with responsibilities across both the electricity and gas systems and the ability to expand its remit to additional energy vectors when needed. The FSO will be in the public sector, with operational independence from government.
GDN	Gas Distribution Network
GSP	Grid Supply Point
GW	Gigawatt
HV	High Voltage
IDNO	Independent Distribution Network Operator
kWh	Kilowatt hour
LAEP	Local Area Energy Plan. A datadriven and whole energy system, evidencebased approach that sets out to identify the most effective route for the local area to contribute towards meeting the national net zero target, as well as meeting its local net zero target.
LCT	Low Carbon Technologies

Term	Description
LENZA	Local Energy Net Zero Accelerator. SSEN's tool for supporting local authority LAEPs.
LEO(N)	Local Energy Oxfordshire (Neighbourhood)
LTDS	Long Term Development Statements. Designed to help to identify and evaluate opportunities for entering into arrangements with us relating to use of system or connection.
LV	Low Voltage
MW	Megawatt
NDP	Network Development Plan
NeRDA	Near RealTime Data Access
NESO	National Energy System Operator. The National Energy System Operator for Great Britain, making sure that Great Britain has the essential energy it needs by ensuring supply meets demand.
NIA	Network Innovation Allowance
NMF	Neutral Market Facilitator will provide a market for trading use of Distributed Energy Resources (DERs).
Open Data	Data in a machinereadable format that can be freely used, shared and built on by anyone, anywhere, for any purpose.
PSS	Primary Substation
RIIOED2	Current price control for Electricity Distribution (20232028)
RIIOED3	The next price control for Electricity Distribution (20282033)
RESP	Regional Energy Strategic Plan
SCO	Second Circuit Outage. Loss of a circuit during the event of an already planned or unplanned network outage.
SEPD	Southern Electric Power Distribution
SHEPD	Scottish Hydro Electric Power Distribution
SIF	Strategic Innovation Fund
SME	Small Medium Size Enterprise
SSEN	Scottish and Southern Electricity Networks
TO	Transmission Owner
TOM	Target Operating Model
VFES	Vulnerability Future Energy Scenarios
VIVID	Vulnerability Identification Via Informative Data

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