2006 GB Seven Year Statement Update

May 2006

INTRODUCTION

We are pleased to present the May 2006 Update to our 2006 GB Seven Year Statement. The Updates are issued at regular intervals (normally quarterly), each reporting on the main developments since the previous issue and largely reflecting information changes notified to us by our customers. This is the first Update of our 2006 GB Seven Year Statement and reports on changes notified to us up to 25 May 2006.

1. 'GB SYS BACKGROUND' SUMMARY

	2006 GB SYS	May Update
Total Generation Capacity by 2012/13 (GW)	94.5	***99.1***
Total CCGT Capacity by 2012/13 (GW)	33.5	***36.1***
Unavailable Generating Units by 2012/13 (GW)	3.4	***3.4***
Plant Margin – 2006/07 (%)	20.9	***21.3***
Plant Margin – 2012/13 (%)	38.9	***46.2***

Notes:
1. Generation capacity values are based on station TEC values where possible.
2. Unavailable generating units are given in Table 3.11 of the GB SYS.

2. GENERATION

2.1 Transmission Access

Access to the GB Transmission System is provided through arrangements with NGET, acting as GBSO, under the Connection and Use of System Code (CUSC). The CUSC has applied across the whole of Great Britain since BETTA "go-live" (1 April 2005). Prior to BETTA "go-live", the CUSC applied in England and Wales but different arrangements applied in Scotland. The pre BETTA go-live generation offers and agreements between relevant TOs and Users needed to be converted into GB Offers.

Standard Condition C18 of the Electricity Transmission Licence places certain obligations on NGET as GBSO. The main requirements of C18 are to ensure that agreements with all existing users are in place by the BETTA go-live date (1 April 2005), and that offers for connection are made to all applicants in accordance with timescales specified in C18.

2.2 New Transmission Contracted Generation

The following projects have contracts that have been signed.

Station Name	Capacity (MW)	Completion Date	Company	Plant Type	Connection Point	Tariff Zone	Consents
Afton	77	09/12/09	E.ON UK plc	Wind	Afton 33kV	11	No
Andershaw	45	25/05/12	Catamount Energy Limited	Wind	Andershaw	9	No
Arecleoch	150	10/09/09	CRE Energy Ltd	Wind	Auchencrosh 275kV	11	No
Auchencorth	45	04/08/10	E.ON UK Renewables Ltd	Wind	Kaimes 33kV	9	No
Black Craig 90MW Windfarm, Dunoon	90	01/12/12	Infinergy Ltd	Wind	Dunoon	7	No
Dersalloch	75	26/03/10	CRE Energy Ltd	Wind	Coylton Substation 275kV	11	No
Earlshaugh	108	09/09/10	Wind Energy (Earlshaugh) Limited	Wind	Moffat	11	No
Ewe Hill	92	31/10/09	CRE Energy Ltd	Wind	Ewe Hill 33kV	11	No
HearthStanes B Windfarm	81	09/09/10	Wind Energy (Hearthstanes) Limited	Wind	Moffat	11	No
Jonscleugh	49.5	09/10/09	E.ON UK plc	Wind	Dunbar 33kV	9	No
Kingsburn Wind farm, Fintry, Stirling	20	31/12/08	Scottish Hydro-Electric Power Distribution Ltd	Wind	Strathleven	8	No
Kyle	300	26/03/10	AMEC Project Investments Ltd	Wind	Kyle	11	No
Limmer Hill	80	12/05/10	Limmer Hill Wind Energy Limited	Wind	Limmer Hill 132/33kV	9	No
Newfield	60	26/11/09	Wind Energy (Newfield) Limited	Wind	Ewe Hill	11	No
Shira Wind Farm	75	31/12/12	Shira Wind Limited	Wind	Shira Wind Farm, Sron Mor, Argyll	7	No
Stacain Wind Farm, Sron Mor, Inveraray	42	01/09/12	Wind Prospect Ltd	Wind	Sloy / Inveraray	7	No
Sutton Bridge B	1305	31/10/10	EDF Energy (Energy Branch) plc	CCGT	Walpole Substation	14	No
Walney Offshore Windfarm	450	31/10/10	Dong Walney UK Ltd	Wind	Heysham 400kV	11	No
West Burton B Stage 1	435	31/10/10	EDF Energy (Energy Branch) plc	CCGT	West Burton	14	No
West Burton B Stage 2	870	31/10/11	EDF Energy (Energy Branch) plc	CCGT	West Burton	14	No

Station Name	Capacity (MW)	Completion Date	Company	Plant Type	Connection Point	Tariff Zone	Consents
Whiteside Hill	27	18/12/09	Airtricity Developments (Scotland) Ltd	Wind	Whiteside Hill	11	No
TOTAL	**4476.5**	**MW**					

2.3 New Transmission Contracted Generation (BELLAs)

The following projects have contracts that have been signed.

Station Name	Capacity (MW)	Completion Date	Company	Plant Type	Connection Point	Tariff Zone	Consents
Aikengall	48	01/10/09	Community Windpower Ltd	Wind	Dunbar GSP 33kV	9	No
Ballindalloch Muir Wind Farm, Balfron	20.8	31/12/08	Npower Renewables plc	Wind	Strathleven	7	No
Barmoor	30	31/07/08	Catamount Energy Limited	Wind	Berwick	9	No
Black Craig 40MW Windfarm, Dunoon	40	31/12/08	Argyll Wind Farms	Wind	Dunoon	7	No
Cruach Mor	90	31/12/12	Infinergy Ltd	Wind	Cruach Mhor 132/33kV	7	No
Drone Hill	32.4	01/07/08	PM Renewables Ltd	Wind	Berwick	9	No
Drummond Wind Farm, St. Fillans	20.4	31/10/10	SSE Generation Ltd	Wind	Killin 132kV	5	No
Tormywheel	40.5	06/10/07	PM Renewables Ltd	Wind	Polkemmet 33kV	9	No
TOTAL	**322.1**	**MW**					

2.4 Modifications to Transmission Contracted Generation

The table lists future generation projects relevant to this update.

Station Name	Capacity (MW)	Completion Date	Company	Plant Type	Connection Point	Tariff Zone	Consents
Harestanes	***213***	18/11/08	CRE Energy Ltd	Wind	Harestanes 33kV	11	No
London Array Stage 1	200	***27/06/10***	E.ON UK plc	Wind	Cleve Hill 400kV	15	No
London Array Stage 2	800	***31/10/10***	E.ON UK plc	Wind	Cleve Hill 400kV	15	No

Station Name	Capacity (MW)	Completion Date	Company	Plant Type	Connection Point	Tariff Zone	Consents
Shell Flats	315	***31/05/09***	Celt Power Limited	Wind	Stanah 132kV	11	No
Sell Moor	-	-	-	-	-	-	-
Whitelee	322	16/11/07	CREEnergy Ltd	Wind	Whitelee 33kV	9	***Yes***
TOTAL	**1850**	**MW**	**CHANGE**	**-116.5**	**MW**		

Notes:
1. Text in bold indicates differences between this update and the main 2006 GB SYS.
2. The Consents column refers to Section 36 and (where appropriate) Section 14 consents for generation projects.
3. The above projects were reported previously as follows:
   - Harestanes, 282MW in 2008
   - London Array, 1000MW in 2008
   - Sell Moor, 47.5MW in 2008 (this project has been withdrawn)
   - Shell Flats, 315MW in 2008

2.5 Modifications to Transmission Contracted Generation (BELLAs)

The table lists future generation projects relevant to this update.

Station Name	Capacity (MW)	Completion Date	Company	Plant Type	Connection Point	Tariff Zone	Consents
Ardkinglas, Clachan (SRO)	19.25	***31/05/07***	AMEC Project Investments Ltd	Wind	Clachan	7	No
Causeymire Phase 2	6.9	01/12/08	Causeymire Windfarm Ltd	Wind	Mybster 33kV	2	***Yes***
TOTAL	**26.15**	**MW**	**CHANGE**	**0.25**	**MW**		

Notes:
1. Text in bold indicates differences between this update and the main 2006 GB SYS and/or previous updates.
2. The TOTAL MW Capacity does not include capacity values in brackets () as these fall outside the seven years of the 2006 GB SYS.
3. The Consents column refers to Section 36 and (where appropriate) Section 14 consents for generation projects.
4. The above projects were reported previously as follows:
   - Ardkinglas, 19MW in 2004

2.6 Existing Transmission Contracted Generation Capacity

The following table lists existing stations that are relevant to this update.

Station Name	Unit(s)	Capacity (MW)	Effective Date	Company	Plant Type	Connection Point	Tariff Zone
Black Law	All	***134***	01/04/05	CRE Energy Ltd	Wind	Black Law 33kV	9
Earlsburn	All	***35***	28/02/06	Earlsburn Wind Energy Ltd	Wind	Earlsburn 33kV	8
Ffestiniog	All	***360***	01/04/06	First Hydro Company	Pumped Storage	Ffestiniog 275kV	14
Hinkley Point B	All	***1261***	01/04/04	British Energy (UK) Ltd	Nuclear AGR	Hinkley Point 275kV	20

Station Name	Unit(s)	Capacity (MW)	Effective Date	Company	Plant Type	Connection Point	Tariff Zone
Little Barford	All	***655***	01/11/05	RWE Npower plc	CCGT	Eaton Socon 400kV	15
Saltend	All	***1100***	01/04/04	Saltend Cogeneration Company Ltd	CCGT	Saltend 275kV	11
	TOTAL	**3545**	**MW**	**CHANGE**	**-1.2**	**MW**	

Notes:
1. Text in bold shows differences between this update and the main 2006 GB SYS.
2. The above stations were previously reported as follows:
   - Black Law, 135.7MW
   - Earlsburn, 32.5MW
   - Ffestiniog, 350MW, rising to 360MW in 2007
   - Hinckley Point B, 1262MW
   - Little Barford, 665MW
   - Saltend, 1101MW

2.7 Transmission Contracted Generation beyond 2012/13

The following table lists generation projects with commissioning dates beyond 2012/13.

Station Name	Capacity (MW)	Year	Company	Plant Type	Connection Point
Aberchalder Cluster Wind farms, Ft Augustus	300	2016	Gamesa Energy UK Ltd	Wind	Fort Augustus
Beatrice Offshore Wind Farm, Dunbeath	1000	2016	SSE Generation Limited	Wind	-
Blackcraig	71.3	2013	SSE Generation Limited	Wind	Blackcraig
Cairn Duhie Wind Farm, Ferness, Nairn	34.5	2014	Renewable Energy Systems UK Ltd	Wind	Berry Burn
Careston Wind Farm, Brechin, Angus	31.5	2014	Renewable Energy Systems UK Ltd	Wind	Brechin
Drummuir Wind, Keith	48.3	2015	Renewable Energy Systems UK Ltd	Wind	Keith/ MacDuff
Dumnaglass Wind Farm, Stratherrick, Inverness	108	2014	Renewable Energy Systems UK Ltd	Wind	Beauly / Foyers
Forse 60MW Windfarm	60	2014	Wind Energy (Forse) Limited	Wind	Forse Wind Farm
Hanna Windfarm	81	2014	Wind Energy (Hanna) Limited	Wind	Fort William
Hill of Fare Wind Farm, Banchory	150	2020	Infinergy Ltd	Wind	Kintore
Invercassley Windfarm, Lairg	50	2014	Airtricity Developments (Scotland) Ltd Lairg Wind Farm Limited	Wind	Lairg
Lairg Wind Farm, Lairg (30 MW)	30	2014	RED (Renewable Energy Development) Limited	Wind	Shin
Laudale Windfarm	75	2014	Wind Energy (Taobh Dubh) Limited	Wind	Laudale Windfarm
Little Law Wind Farm	42	2014	Green Power Little Law Ltd	Wind	Braco

Station Name	Capacity (MW)	Year	Company	Plant Type	Connection Point
Meikle Carewe Wind Farm, Stonehaven	11	2014	Renewable Energy Systems UK Ltd	Wind	Redmoss
Mellock Wind Farm (Ochils) Milnathort	37.5	2014	Mellock Hill Wind Energy Ltd	Wind	Dalqueich
Mid Hill Windfarm, Ousdale, Caithness	75	2020	Infinergy Ltd	Wind	Beauly
Perth 38 MW Windfarm	38	2014	Wind Energy (Dunan) Limited	Wind	Glenn Quaich
Scaul Hill Windfarm, Keith	180	2020	Infinergy Ltd	Wind	Keith grid
Spittal Hill Windfarm, Nr Mybster, Caithness	80	2014	Spittal Hill Wind Farm Limited	Wind	Mybster
Tofingall Wind Farm, Mybster, Caithness	50	2016	Gamesa Energy UK Ltd	Wind	Mybster
Tom Nan Clach Windfarm, Cawdor, Inverness	150	2020	Infinergy Ltd	Wind	Inverness
Viking Energy, Shetland	300	2014	Viking Energy Limited	Wind	Shetland
Cairn Uish (Phase 2)	40	2014	Fred Olsen Wind 1 Limited	Wind	Dallas
Hill of Garvock, Laurencekirk	12	2014	Orkney Sustainable Energy Ltd	Wind	Fiddes
Pentland Road Wind, Lewis	13	2013	Farm Energy Ltd	Wind	Stornoway
Port Clair Wind Farm, Fort Augustus	35	2014	Port Clair Wind Energy Ltd	Wind	Fort Augustus
Shebster Wind Farm, by Reay, Caithness	14	2013	C. Sutherland & Son	Wind	Dounreay
TOTAL	**3117.1**	**MW**			

Notes:
1. The “Year” column is based on the Contracted Completion Date.
2. The following projects have BELLA’s:
    - Cairn Uish Phase 2
    - Hill of Garvock
    - Pentland Road
    - Port Clair
    - Shebster

3. DEMAND, CAPACITY TOTALS AND PLANT MARGINS

3.1 Demand Forecasts

Updated demand forecasts are given below. These demands take account of the final ACS maximum outturn demand for 2005/06. They are unrestricted and therefore do not include the effect of load management. These demands also include station demand.

	Total Demand (MW)							
	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13
Winter Peak Demand	62600	63500	64500	65300	66100	66900	67600	68400

3.2 Generation Capacities

This table gives information on capacity totals for all directly-connected and Large Power Stations. The winter peak demands are customer-based forecasts in MW and are used to calculate plant margins in section 3.2. Capacity values are based on station TEC values where possible.

Generation Background	Total Capacity (MW)						
	06/07	07/08	08/09	09/10	10/11	11/12	12/13
GB SYS background (SYS)	76268	78326	86078	88832	95195	98255	99148
Consents (C)	76268	76761	78637	78637	77657	77657	77657
Existing or Under Construction (E,UC)	76268	75589	76463	76463	75483	75483	75483
Winter Peak Demand	62900	63900	64700	65500	66300	67000	67800

Notes:
1. The figures are based on the assumed year of commissioning or decommissioning.
2. The SYS background includes all planned generation with or without Section 36 and/or Section 14 consent.
3. The Consents background includes all planned generation that has both Section 36 and Section 14 consent.
4. The Existing or Under Construction background includes all generation projects currently under construction and all planned closures of generation.
5. The winter peak demands (customer-based forecast) are used in section 3.2 to calculate plant margins for each of the above backgrounds; these demands exclude station demand, but include the export to Northern Ireland.

3.3 Plant Margins

The following projected margins include changes in generation capacity given in section 3.1 above for directly-connected and Large Power Stations and use the customer-based demand forecasts given in section 3.1.

Generation Background	Plant Margin (%)						
	06/07	07/08	08/09	09/10	10/11	11/12	12/13
GB SYS background (SYS)	21.3	22.6	33.0	35.6	43.6	46.6	46.2
Consents (C)	21.3	20.1	21.5	20.1	17.1	15.9	14.5
Existing or Under Construction (E,UC)	21.3	18.3	18.2	16.7	13.9	12.7	11.3

Notes:
1. The three different backgrounds correspond to those in section 3.1.

4. TRANSMISSION SYSTEM

The following items are reported as either significant changes to the planned transmission system, or revisions to construction programmes.

Afton (by 2009)

Establish a new 132/33kV substation compound at the Afton site location, including a 2 x 90MVA 132/33kV transformer arrangement with associated switchgear, and 33kV double-busbar switchgear.

Andershaw (by 2012)

Extend the compound at Coalburn substation for an additional 132kV feeder circuit breaker bay. Construct a 12km 132kV trident 200mm2 single circuit connecting from Coalburn substation to the new proposed wind farm substation terminating in a 132kV isolator at Andershaw Wind Farm site.

Ardbrecknish (by 2012)

Establish a new 275/132kV substation at Ardbrecknish in Argyll. Connect the new Ardbrecknish substation to Dalmally 275kV switching station with a new 275kV double-circuit line.

Modify the Dalmally 275kV switching station and reconductor the Dalmally-Windyhill 275kV line to provide additional generation capacity.

Rebuild the existing 132kV line between Ardbrecknish and Taynuilt.

Arecleoch (by 2009)

Establish a substation compound containing 2 x 90MVA 132/33kV transformers. Provide two outdoor 33kV feeder circuit breakers and associated switchgear, with each being connected to a 90MVA 132/33kV transformer.

Construct a 132kV Trident overhead line between Mark's Hill substation and Arecleoch substation. At Mark's Hill 132kV substation, install a 132kV circuit breaker, connecting to the new Trident overhead line to Arecleoch. At Arecleoch, install two 132kV isolators, connecting to the new Trident overhead line, to control the two new 90MVA 132/33kV transformers.

Auchencorth (by 2010)

Establish a new substation at Auchencorth consisting of a 60MVA 132/33kV transformer arrangement with associated switchgear. Provide a 33kV single-busbar generator circuit breaker connected to the 132/33kV transformer. Extend the 275kV substation compound at Kaimes and install a 275/132kV transformer with a single 132kV circuit breaker. Establish 14.5km of 132kV trident 200mm2 overhead line circuit between Kaimes and Auchencorth.

Brackley (by 2012)

Install two 132kV circuit bays at Ardbrecknish 275/132kV substation. Construct two 132kV wood pole overhead lines over a route length of approximately 9km between Ardbrecknish 275/132kV substation and Brackley Wind Farm. Establish a new 133/33kV substation compound at Brackley Wind Farm including construction of the control building switchroom. Establish a twin 90MVA 132/33kV transformer arrangement within the new substation compound including two 132kV circuit switch bays, and an extendable double busbar 33kV indoor switchboard within the substation switchroom. The extendable 33kV switchboard will comprise one bus coupler 33kV circuit breaker and two transformer 33kV circuit breakers.

Space for up to four 33kV feeder circuit breakers will be made available for installation of outgoing 33kV circuits.

Bramford (by 2010)

Turn the Norwich-Sizewell 400kV circuit into Bramford 400kV substation to form Norwich-Bramford and Bramford-Sizewell 400kV circuits. Install two new 225MVAr MSCDNs at Bramford 400kV substation.

Coalburn (by 2010)

Construct a 400kV double-busbar substation at Coalburn consisting of two 400/132kV 240MVA auto-transformer circuits. The substation will terminate the Harker (Elvanfoot) - Coalburn and Coalburn - Strathaven 400kV circuits. Construct a 132kV double-busbar substation at Coalburn terminating two 400/132kV auto transformer circuits. Turn the existing Strathaven - Harker 400kV double-circuit overhead line into the new Coalburn 400/132kV substation.

Coventry (by 2010)

Install a new (1st) 150MVAr MSC at Coventry 275kV substation.

Cruach Mhor (by 2012)

Install two 132kV circuit bays at Ardbrecknish 275/132kV substation, and construct two 132kV wood pole overhead lines, over a route length of approximately 5km, between Ardbrecknish 275/132kV substation and Cruach Mhor. Establish a new 132/33kV substation compound at Cruach Mhor. Establish a two 120MVA 132/33kV transformer arrangement within the new substation compound, including two 132kV circuit switch bays, and an extendable double-busbar 33kV indoor switchboard within the substation switchroom. The extendable 33kV switchboard will comprise one bus coupler 33kV circuit breaker and two transformer 33kV circuit breakers. Space for up to five 33kV feeder circuit breakers will be made available.

Dersalloch (by 2010)

Establish a new 132/33kV substation at Dersalloch, including two new 90MVA 132/33kV transformers with associated switchgear, and new 33kV double-busbar switchgear. Extend the new substation compound at Kyle South and install two new 132kV circuit breakers. Construct 12km of double-circuit 200mm2 132kV overhead line between Kyle South and Dersalloch.

Earlshaugh (2010)

Establish a new substation at Earlshaugh, to include a new generator circuit breaker on the 132kV busbar. Provide a new 132kV circuit breaker at Moffat. Establish a 14km, 132kV single-circuit overhead line from Moffat to Earlshaugh.

East Claydon (by 2010)

Install a new (3rd) 225MVAr MSC at East Claydon 400kV substation.

Ewe Hill (by 2009)

Establish a new 132kV substation at Ewe Hill, including two new 120MW 132/33kV transformers with associated switchgear.

Hearthstanes (by 2010)

Establish a new substation at Hearthstanes, including a new 120MVA 132/33kV transformer arrangement with associated switchgear. Provide a 33kV single-busbar generator circuit breaker connected to the 132/33kV transformer. Extend the substation compound at Moffat for new 132kV circuit breaker. Construct 15km of 132kV single-circuit trident 200mm2 overhead line circuit from Moffat to Hearthstanes, terminating in a 132kV line isolator at Hearthstanes.

Hendon (2007)

By 31/10/07, install new 275/132kV 240MVA SGT unit at Elstree. Install approximately 12km of 132kV cable to a new 132kV switch bay connected to EDFs new 132kV GIS substation at Hendon (new GSP) to connect to the Hendon/Mill Hill demand group.

Hillhouse (by 2010)

Construct a new 400kV AIS double-busbar substation at Hillhouse, including two skeletal generator bays. Construct a new 400kV double-circuit route from Stanah 400/132kV substation to Hillhouse (approximately 1.5km). Replace the two existing 400/132kV SGTs with new SGTs at Hillhouse. Install two 132kV cables from Hillhouse to the existing United Utilities Stanah 132kV substation.

Johnscleugh (2009)

Carry out modifications to Torness 132kV substation to install two new 132kV circuit breakers and associated equipment. Construct a 132kV double-circuit overhead line from Torness 132kV substation to Jonscleugh. Establish a 132kV substation compound at Jonscleugh, along with 2 x 60MVA 132/33kV transformers with associated switchgear.

Keadby (by 2010)

Replace circuit breakers X405 and X210 with 4000A duty 63kA fault rated switchgear at Keadby 400kV substation.

Killin (by 2010)

Replace the existing 15MVA 132/33kV transformer with a higher rated 45MVA 132/33kV transformer.

Kyle North / Kyle South (by 2010)

Provide one circuit breaker on the Transmission 132kV double busbar switchboard at Kyle South. Establish a 132kV single circuit trident line 7km long from Kyle South, terminating in Kyle North.

Kyle South (by 2010)

Establish a new 132kV substation at Kyle South including 2 feeder bays and 1 bus coupler bay. Construct a double circuit 132kV overhead line from New Cumnock 132kV substation to the new Kyle South Collector substation. At New Cumnock, establish two new 132kV circuit breaker bays to facilitate the connection of the new circuits.

Limmer Hill (2010)

Extend the compound at Coalburn substation for an additional 132kV feeder circuit breaker bay. Construct a 15km 132kV trident 200mm2 single circuit connecting from Coalburn substation to the new proposed wind farm substation terminating in a 132kV isolator at Limmer Hill Wind Farm site.

Mark's Hill (by 2009)

Construct a tee-connection on the Auchencrosh-Coylton 275kV single-circuit overhead line, at the Mark's Hill Wind Farm site. From Mark's Hill Wind Farm, a 275kV circuit breaker will control a section of 275kV busbar.

A 275kV circuit breaker will be connected to the Mark's Hill 275kV busbar to control a 240MVA 275/132kV auto transformer. From this, a 132kV circuit breaker will control a section of 132kV busbar.

Mannington (2009)

By 31/10/09, install a new additional 400/132kV 240MVA transformer at Mannington substation.

Newfield (by 2009)

Establish a 132kV substation compound at Newfield, along with 2 x 90MVA 132/33kV transformers with associated switchgear. Construct a 132kV double-circuit overhead line connecting from the Ewe Hill 'T' point to the substation at Newfield.

North Hyde (2008)

By 31/10/10, install two new additional 275/66kV 240MVA transformers at North Hyde substation (2008 in main SYS).

Ninfield (2007)

Install a new SGT by December 2007.

Norwich (by 2010)

Install a new 225MVAr MSCDN at Norwich Main 400kV substation.

Overhead Line Works (by 2010)

Construct a new 132kV double-circuit overhead line from the new Kyle South substation to New Cumnock 132kV substation. Install two new 132kV circuit breaker bays at New Cumnock to facilitate the connection of the new circuits.

Overhead Line Works (by 2009)

Construct a new 132kV double-circuit route from Gretna to Ewe Hill, consisting of 15km of overhead line and 1km of underground cable.

Overhead Line Works (by 2009)

Construct a double circuit 132kV overhead line (10km) from Windy Standard collector substation, heading east, to a Whiteside Hill 'T' site. Construct a double circuit 132kV overhead line from New Cumnock 132kV substation to the new Windy Standard Collector Substation. At New Cumnock, establish two new 132kV circuit breaker bays to facilitate the connection of the new circuits.

Overhead Line Works (by 2010)

Reconductor the Cottam-Keadby 400kV double-circuit route with Matthew (GAP) conductor.

Overhead Line Works (by 2010)

Hot-wire the Drax-Thornton double-circuit route for 75^{o}C operation.

Overhead Line Works (by 2010)

Reconductor the Walpole-Norwich Main 400kV double-circuit route with 3x700mm^2 AAAC for 75^{o}C operation. Reconductor the Norwich Main-Bramford 400kV double-circuit route with 3x700mm^2 AAAC for 75^{o}C operation.

Overhead Line Works (by 2010)

Reconductor the Heysham-Quernmore tee and Heysham-Hambleton tee 400kV double-circuit overhead lines with 3x700mm2 AAAC conductor. Reconductor the Penwortham-Quernmore tee and Penwortham-Hambleton tee 400kV double-circuit overhead lines with 2x260mm2 GZTACSR GAP conductor.

Overhead Line Works (by 2012)

Uprate the 275kV circuits between Kirkby and Penwortham to 400kV operation. Replace the two 275/132kV 180MVA SGTs at Washway Farm with 400/132kV 240MVA units. Replace other 275kV substation assets at Washway Farm with 400kV equipment. Remove the 400/275kV transformers at Penwortham and rationalise the remaining 275kV assets. Construct a new 400/275kV banking compound at Kirkby. Install 4 x 1000MVA 400/275kV transformers, of which one will be an existing Penwortham unit. Install a quadrature booster at Lister Drive 275kV substation, to be connected in series with the Birkenhead-Lister Drive 275kV circuit.

Pelham (by 2010)

Install a new (1st) 225MVAr MSC at Pelham 400kV substation.

Penwortham (by 2010)

Install quadrature boosters at Penwortham 400kV substation, to be connected in series with the Penwortham-Daines and Penwortham-Padiham 400kV circuits.

Rayleigh (2007)

Install new 400/132kV SGT (SGT3) at Rayleigh connecting to a new 132kV GIS substation located at Rayleigh Main.

Rayleigh (2010)

Complete the transfer of the existing 132kV SGT1, 2 and 4 bays into the new EDF 132kV substation adjacent to Rayleigh Main 400kV. Demolish OHL connections and switchgear associated with existing Rayleigh Local 132kV site.

Redbridge (2007)

By 31/10/07, install a new 275/33kV 180MVA SGT4 unit. Install an automatic switching scheme at the site.

St Johns Wood (2006)

Divert the 132kV St Johns Wood-Mill Hill cables into a temporary 132kV EDF switchboard.

St Johns Wood (2008)

Re-connect the existing 275/132kV SGT2B and SGT4B at St Johns Wood 132kV substation. Refurbish existing 275kV assets at the St Johns Wood 275kV mesh substation.

St Johns Wood 66kV (Lodge Road) (2007)

Install a new 400/66kV SGT9B circuit at St Johns Wood connecting to a new Lodge Road 66kV substation. Divert 275/66kV SGT2A into a new 66kV switchbay via new 66kV cables.

St Johns Wood 66kV (Lodge Road) (2008)

Transfer the existing 275/66kV SGT4A into a new 66kV switchbay via a new 66kV cable.

St Johns Wood 66kV (Lodge Road) (2009)

Complete the transfer of the existing 275/66kV SGT1A and SGT3A into new 66kV switchbays via new 66kV cables. Demolish the old 66kV substation bays.

Sundon (by 2010)

Install three new (2^{nd}, 3^{rd}, 4^{th}) 225MVAr MSC's at Sundon 400kV substation.

Stacain (by 2012)

Install two 132kV circuit bays at Ardbrecknish 275/132kV Substation and construct two 132kV wood pole overhead lines, over a route length of approximately 8km, between Ardbrecknish 275/132kV Substation and Stacain Wind Farm.

Establish a new 132/33kV substation at Stacain Wind Farm, to include a twin 60MVA 132/33kV transformer arrangement with two 132kV circuit switch bays, and an extendable double busbar 33kV indoor switchboard within the substation switchroom.

The extendable 33kV switchboard will comprise of one bus coupler and two transformer 33kV circuit breakers which will be part of the Transmission System, plus space for up to four User bays will be made available for the User to install their outgoing 33kV circuit breakers.

Transmission Works (by 2012)

Establish a new 132kV switching station at Clunister, near Dunoon and provide two 132kV AC subsea circuits between the new switching station and Inverkip. Equip mesh-corner five at Inverkip substation with a circuit breaker and associated 400kV switchgear. Within the existing compound at Inverkip, install two 400/132kV 240MVA transformers, associated 132kV circuit breakers and switchgear.

Erect a new double-circuit 132kV line between the new switching station at Clunister and the existing 132/33kV substation at Dunoon, routed via Black Craig. Provide two 132kV connections to two 132kV sub-sea cable connections to Clunister substation. Decommission and dismantle the existing double circuit 132kV line between Whistlefield and Dunoon substations. Install of down-droppers to the new substation from the 132kV double circuit line.

Establish 2 x 120MVA 132/33kV transformers within Black Craig (90MW) substation including two 132kV circuit switch bays. Establish a control/switchroom building including a three panel 33kV indoor double busbar switchboard within the substation switchroom.

Walpole (by 2010)

At Walpole 400kV substation:

- extend the 400kV busbars for the connection of two generator bays.
- equip the reserve section breaker
- extend the 400kV busbars for three new section bays and one coupler bay
- contsruct three new 400kV section breaker bays and install the breakers
- construct one new 400kV coupler bay and install the breaker;
- transfer the Norwich 1 & 2 circuits to the new bays (so that the existing Norwich 1 & 2 breakers can be used for a generation connection);
- uprate the HV breakers of SGT1, SGT2 and SGT4.

Walpole (by 2010)

Rebuild Walpole 132kV substation

West Burton (by 2010)

Extend West Burton 400kV substation to provide one skeletal generator bay at each end. Install a new (2nd) 400kV reserve section breaker. Install two new main busbar section breakers, utilising HIS equipment in space currently occupied by disconnectors X228 and X324.

Whiteside Hill (by 2009)

Establish a 132kV substation compound at the Whiteside Hill 132/33kV substation site, along with 2 x 30MVA 132/33kV transformers with associated switchgear. Construct a 132kV double tee at the Whiteside Hill 'T' point at the Whiteside Hill 132/33kV substation.

Willington East (by 2010)

Install a new (3rd) 225MVAr MSC at Willington East 400kV substation.

Wymondley (by 2010)

Turn the Sundon-Pelham 400kV circuit into Wymondley 400kV substation to form Sundon-Wymondley and Wymondley-Pelham 400kV circuits. Install an additional 400kV section breaker and an additional 400kV bus coupler. Relocate the existing Pelham 400kV circuit at Wymondley.

Install a new (2nd) 225MVAr MSC at Wymondley 400kV substation.

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