

2006 GB Seven Year Statement Update

August 2006

INTRODUCTION

We are pleased to present the August 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 second Update of our 2006 GB Seven Year Statement and reports on changes notified to us up to 31 August 2006.

1. 'GB SYS BACKGROUND' SUMMARY

	2006 GB SYS	May Update	August Update
Total Generation Capacity by 2012/13 (GW)	94.5	99.1	102.6
Total CCGT Capacity by 2012/13 (GW)	33.5	36.1	38.4
Unavailable Generating Units by 2012/13 (GW)	3.4	3.4	3.4
Plant Margin – 2006/07 (%)	20.9	21.3	22.1
Plant Margin – 2012/13 (%)	38.9	46.2	51.3

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
Crystal Rig II	200	20/11/2009	Fred. Olsen Renewables Ltd	Wind	Crystal Rig II	9	Yes
Eclipse Energy	1	31/10/2008	Eclipse Energy Company Ltd	OCGT	Heysham 132kV	11	No
Eclipse Energy	99.9	31/10/2010	Eclipse Energy Company Ltd	OCGT	Heysham 132kV	11	No
Little Barford B Power Station	475	13/04/2012	RWE Npower plc	CCGT	Eaton Socon	15	No
Longpark	47.5	26/12/2008	Wind Prospect Ltd	Wind	Longpark	9	No
Neilston	100	30/07/2010	Gamesa Energy UK Ltd	Wind	TBC	9	No
Ormonde Energy	1	31/10/2008	Ormonde Energy Limited	Wind	Heysham 132kV	11	No
Ormonde Energy	99.9	31/10/2010	Ormonde Energy Limited	Wind	Heysham 132kV	11	No
Roths Bio-Plant	52	31/10/2008	Scottish BioPower Ltd	Biomass	Glenrothes	8	No
TOTAL	1074.3	MW					

Notes:

1. The Consents column refers to Section 36 and (where appropriate) Section 14 consents for generation projects.
2. The total capacity of Eclipse Energy is 99.9MW.
3. The total capacity of Ormonde Energy is 99.9MW.

2.3 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
Aultmore Windfarm	60	01/06/2010	AMEC Project Investments Ltd	Wind	Aultmore Windfarm	2	Applied
Edinbane Wind, Skye	56	01/07/2008	AMEC Project Investments Ltd	Wind	Edinbane 132kV	3	No
Grain Stage 1	860	31/10/2010	E.ON UK plc	CCGT	Grain 400kV	15	No
Grain Stage 2	430	31/10/2011	E.ON UK plc	CCGT	Grain 400kV	15	No
Immingham CHP Stage 2	601	31/10/2008	Immingham CHP LLP	CHP	Humber Refinery 400kV	11	Applied
Montreathmont Moor Wind, Angus	40	01/12/2008	Scottish Hydro-Electric Power Distribution Ltd	Wind	Bridge of Dun BSP	2	No
Netherlands Interconnector Stage 1	0	31/10/2009	BritNed Developments Ltd	HVDC Link	Grain 400kV	15	No
Netherlands Interconnector Stage 2	800	01/04/2010	BritNed Developments Ltd	HVDC Link	Grain 400kV	15	No
Netherlands Interconnector Stage 3	520	31/10/2010	BritNed Developments Ltd	HVDC Link	Grain 400kV	15	No
Severn Power Stage 1	425	31/10/2009	Severn Power Ltd	CCGT	Uskmouth 275kV	19	Applied
Severn Power Stage 2	425	31/08/2010	Severn Power Ltd	CCGT	Uskmouth 275kV	19	Applied
Staythorpe C Stage 1	425	31/10/2008	RWE Npower plc	CCGT	Staythorpe	14	Yes
Staythorpe C Stage 2	425	31/10/2010	RWE Npower plc	CCGT	Staythorpe	14	Yes
Staythorpe C Stage 3	850	31/10/2012	RWE Npower plc	CCGT	Staythorpe	14	Yes
Sutton Bridge B	1305	31/10/10	West Burton Limited	CCGT	Walpole	14	No
West Burton B Stage 1	435	31/10/10	West Burton Limited	CCGT	West Burton	14	No
West Burton B Stage 2	870	31/10/11	West Burton Limited	CCGT	West Burton	14	No
TOTAL	8527	MW	CHANGE	1810	MW		

Notes:

1. Text in bold indicates differences between this update and the main 2006 GB SYS and updates.
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:
 - Aultmore, 60MW in 2008
 - Edinbane, 56MW in 2007
 - Grain Stage 1, 590MW in 2010
 - Grain Stage 2, 590MW in 2011
 - Immingham CHP Stage 2 was reported as having consents.
 - Netherlands Interconnector Stage 1, 600MW in 2008
 - Netherlands Interconnector Stage 2, 200MW in 2009
 - Netherlands Interconnector Stage 3, 520MW in 2010
 - Severn Power was reported as Uskmouth 2
 - Staythorpe C, 0MW in 2005

2.4 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
Coryton	all	743	01/04/06	Coryton Energy Company Ltd	CCGT	Coryton South 400kV	15
Fawley	all	1036	01/07/06	RWE Npower plc	Oil + AGT	Fawley 400kV	20
Tilbury	all	1102	01/06/05	RWE Npower plc	Medium Unit Coal + AGT	Tilbury 275kV	15
TOTAL		2138	MW	CHANGE	555	MW	

Notes:

1. Text in bold shows differences between this update and the main 2006 GB SYS and subsequent updates.
2. The above stations were previously reported as follows:
 - Coryton, 720MW
 - Fawley, 530MW
 - Tilbury, 1076MW

2.5 Existing Transmission Contracted Generation Capacity (BELLA's)

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
Pauls Hill	all	70	-	Paul's Hill Wind Ltd	Wind	Boat of Garten	2
TOTAL		70	MW	CHANGE	0.0	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:
 - Pauls Hill was reported as Pauls Hill (56MW) and Pauls Hill Additional Capacity (14MW)

2.6 Transmission Contracted Generation beyond 2012/13

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

Station Name	Capacity (MW)	Company	Plant Type	Connection Point
Braemore Windfarm, Shin	66	Wind Prospect Developments Limited	Wind	Shin 33kV
Cairn Duhie Windfarm, Ferness, Nairn	34	Scottish Hydro-Electric Power Distribution Ltd	Wind	Berry Burn
Cambusmore Windfarm	41	Renewable Energy Systems UK Ltd	Wind	Cambusmore Windfarm
Carscreugh	21	Gamesa Energy UK Ltd	Wind	TBC
Chapelcross Biopower CHP Plant	250	Scottish Biopower Ltd	Biopower CHP	Chaplecross 11kV
Corriemoillie Windfarm, Dingwall	22	E.ON UK plc	Wind	Beauly
Glen Calvie B Wind Farm, Ardgay	45	Wind Energy (Glencalvie) Limited	Wind	Beauly / Shin
Glenmoriston Hydro Group (Additional Capacity)	6	SSE Generation Limited	Hydro	Fort Augustus
Jacksbank Windfarm, Glenbervie	81	Ron Shanks Development Project Limited	Wind	Mid Hill
Kilchattan Wind Farm, Campbeltown, Kintyre	10	Wind Prospect Developments Ltd	Wind	Carradale 33kV
Kildrummy Wind Farm	14.3	Kildrummy Wind farm Ltd	Wind	Tarland
Killoch Biopower CHP Plant	250	Scottish Biopower Ltd	Biopower CHP	Coylton 11kV
Lochelbank Windfarm, Bridge of Earn, Perthshire	12	Lochelbank Wind farm Ltd	Wind	Abernethy
Tomatin Wind Farm (Additional Capacity)	69	Eurus Energy UK Limited	Wind	Beauly / Boat of Garten
TOTAL	921.3	MW		

Notes:

- The following projects have BELLA's:
 - Kilchattan
 - Kildrummy
 - Lochelbank

3. DEMAND, CAPACITY TOTALS AND PLANT MARGINS

3.1 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)	76823	78825	86500	89253	97469	100369	102587
Consents (C)	76823	77316	79016	79216	78661	78661	79511
Existing or Under Construction (E,UC)	76823	76144	77443	77443	76888	76888	77738
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.

3.2 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)	22.1	23.4	33.7	36.3	47.0	49.8	51.3
Consents (C)	22.1	21.0	22.1	20.9	18.6	17.4	17.3
Existing or Under Construction (E,UC)	22.1	19.2	19.7	18.2	16.0	14.8	14.7

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.

Bramford (2008)

Install a new 400/132kV 240MVA transformer (SGT6) by 31st October, 2008.

Crystal Rig (by 2009)

Construct a new 400kV double-busbar substation at the Crystal Rig II Wind Farm site. Connect the new substation into the Torness-Smeaton 400kV circuit.

Eaton Socon (by 2012)

Extend section 1 main and reserve busbars to allow connection of a generator bay.

Elstree (2012)

Install a new quadrature booster.

Enderby (2008)

Install a new SGT by 31st October, 2008.

Enderby (by 2012)

Install two new (3rd and 4th) 225MVAr MSC's at Enderby 400kV substation.

Exeter (2008)

Install a new transformer (SGT7) by 31st October, 2008.

Hackney / West Ham (by 2009)

Construct a new 400kV double-busbar substation at Hackney. Construct a new 400kV double-circuit underground cable route between Hackney and West Ham. Connect one of the new 400kV underground cable circuits into the new 400kV substation at Hackney.

Disconnect the two existing 400/275kV transformers at West Ham. Connect two new 400/275kV transformers at Hackney, into the Hackney-Tottenham 1 & 2 circuits.

Dismantle the existing Hackney-West Ham 275kV double-circuit overhead line route.

Hackney / West Ham (by 2010)

Connect the second new 400kV underground cable circuit between Hackney and West Ham into the new 400kV substation at Hackney.

Heysham (by 2010)

Install a new 240MVA, 400/132kV transformer (SGT4) at Heysham, including HV and LV switchbays, and associated cabling, by 31st October 2010.

High Marnham (by 2010)

Install a new (1st) 225MVAr, MSC at High Marnham 400kV substation by 31st October 2010.

Overhead Line Works (by 2011)

Carry out thermal uprating works on the following circuits:

- Pembroke-Swansea North 400kV 1, 2, 3 & 4
- Swansea North-Cilfynydd 400kV 1, 2 and 3
- Baglan Bay-Margam 275kV

Pelham (by 2012)

Install a new (2nd) 225MVAR, MSC at Pelham 400kV substation.

Pembroke (by 2011)

At Pembroke 400kV substation, double up the three bus section and two bus coupler circuit breaker bays. Extend the 400kV busbars to accommodate five new generator bays. Replace all 400kV feeder circuit breakers and line protections.

Swansea North (by 2011)

Construct a new 400kV substation at Swansea North. Turn the Pembroke-Cilfynydd 400kV 1 & 2 circuits and the Pembroke-Walham 400kV circuit into the new substation. This forms the following circuits:

- Pembroke-Swansea North 400kV 1, 2, 3 & 4
- Swansea North-Cilfynydd 400kV 1, 2 and 3
- Swansea North-Walham 400kV

Stoke Bardolph (2010)

Establish a new Grid Supply Point at Stoke Bardolph, near Nottingham, by 31st October, 2010.

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