2008 Great Britain Seven Year Statement

(May 2008)

nationalgrid

GREAT BRITAIN SEVEN YEAR STATEMENT

May 2008

National Grid

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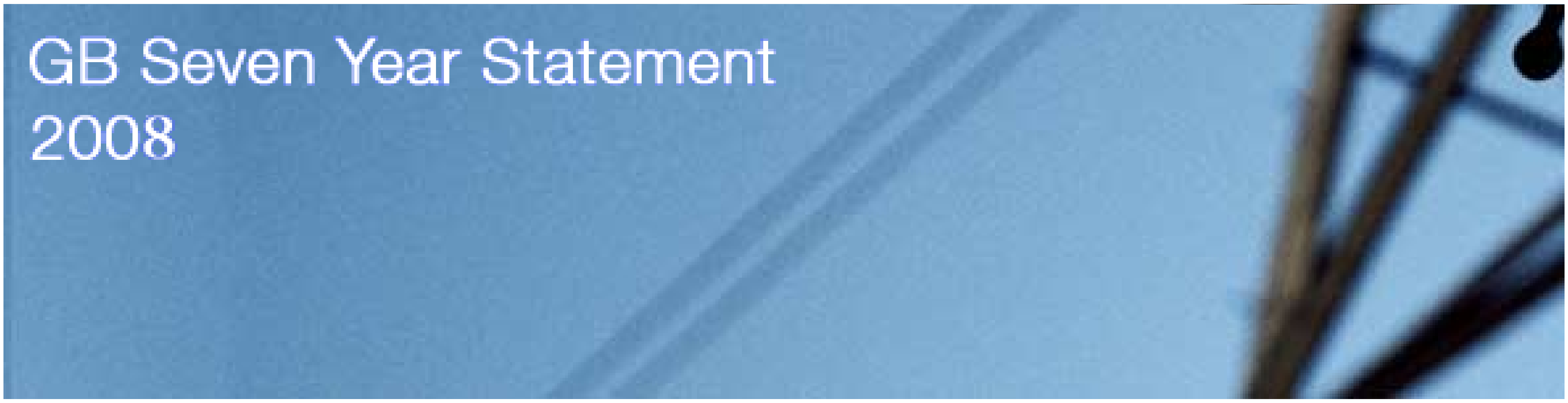

National Grid Electricity Transmission plc, acting in its role as Great Britain System Operator (GBSO), is pleased to present this 2008 GB Seven Year Statement (GB SYS), which covers the years 2008/09 to 2014/15 inclusive.

This is the third GB SYS we have produced. Under the British Electricity Trading and Transmission Arrangements (BETTA), which were introduced on 1 April 2005, National Grid, in its role as GBSO, became required to produce a single Seven Year Statement covering the whole of the Great Britain (GB) transmission system (i.e. the GB SYS) on an annual basis. The two Scottish transmission licensees are required to assist National Grid in preparing each GB SYS pursuant to their licence obligations.

The form of this 2008 GB SYS has been approved by the Authority and its main purpose is to assist existing and prospective new users of the GB transmission system in assessing opportunities available to them for making new or additional use of the GB transmission system in the competitive electricity market.

The subject matter of this 2008 GB SYS largely reflects that of earlier Statements, which in turn was developed over a number of years taking into account readers' preferences made known through annual customer surveys. Accordingly, this GB SYS contains a wide range of technical and non-technical information relating to the GB transmission system.

I hope you find our 2008 GB SYS both interesting and informative. However, I would welcome any comments you may have on both the style and the content. An electronic questionnaire is available on our website for this purpose Customer Survey Online Form.

I look forward to receiving your views on the Statement, including suggestions on how it may be further improved.

Nick Winser, Group Director, Transmission
National Grid plc
May 2008

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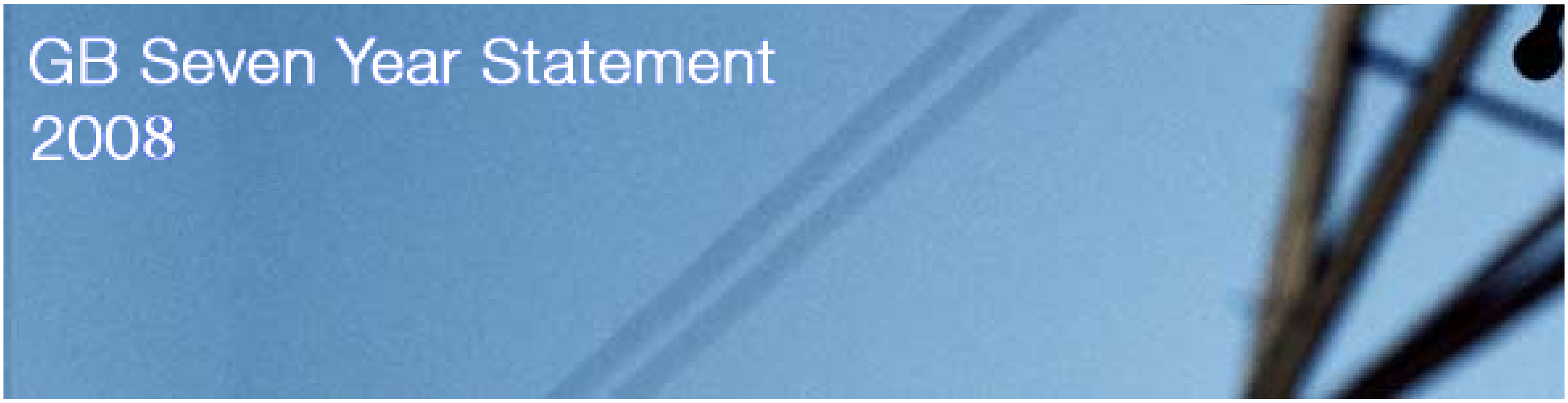

Introduction to the Executive Summary

This 2008 Great Britain Seven Year Statement (GB SYS) is the fourth Statement to be produced since the British Electricity Trading and Transmission Arrangements (BETTA) came into effect on 1 April 2005.

With the introduction of BETTA, National Grid, in its role as Great Britain System Operator (GBSO), is required to produce a single GB SYS covering the whole of Great Britain on an annual basis. The two Scottish transmission licensees are required to assist National Grid in preparing the Statement pursuant to their licence obligations

This 2008 GB SYS presents a wide range of information relating to the transmission system in Great Britain including information on demand, generation, plant margins, the characteristics of the existing and planned GB transmission system, its expected performance and capability and other related information. Amongst other things, this information should assist existing and prospective new Users of the GB transmission system in assessing the opportunities available to them for making new or further use of the GB transmission system in the competitive electricity market in Great Britain.

This Executive Summary provides a brief description of some of the key points contained in the main text. For a more complete picture on any particular topic, including the terminology used, the reader is advised to consult the relevant section of the main text. In particular, readers unfamiliar with BETTA are advised to refer to the chapter in the main text titled "Market Overview" Market Overview, which provides a high level overview of BETTA and also reports on related issues such as governance, institutional and contractual arrangements. That information is neither repeated nor summarised in this Executive Summary.

The data and results presented in this summary are correct as at 31 December 2007 (the data freeze date) and do not include changes included in the Quarterly Updates which are issued on a regular basis (at intervals of approximately three months). The first Update will be issued soon after the main Statement and will report on changes that have occurred since the data freeze date.

Electricity Demand (See Chapter 2)

The main forecasts of electricity demand to be met from the GB transmission system presented in this Statement are based on information submitted by Customers who take (or propose to take) electricity from the system. However, for comparison, our own view of demand growth is also included. Unlike the 'User' based forecasts, which include details of individual Grid Supply Point demands, the NGET forecasts are national projections for Great Britain.

Unless otherwise stated, all demand forecasts presented are in respect of the Average Cold Spell (ACS) winter peak and include transmission losses, distribution losses and exports to External Systems across External Interconnections. The forecasts are in respect of the time of simultaneous peak on the GB transmission system and are unrestricted (i.e. take no account of demand response/management by customers). This prudent approach in transmission planning is made on the basis that demand response/management by customers cannot be fully relied upon to be enacted at peak times.

User Based Forecasts

Correcting historical actual demands to ACS conditions eliminates the weather effects and gives a better indication of the underlying pattern of annual peak demand. Correcting winter weekday peak demands in 2007/08 to ACS conditions yields a provisional 'unrestricted' peak of 61.4GW; a decline of 400MW on the previous winter's ACS peak.

Half the drop arose from a 200MW reduction in interconnector exports at peak to Northern Ireland. In addition, gas prices have risen sharply in recent years and the pre-dominance of this fuel for electricity generation has resulted in significant increases in electricity prices which have been a major contributory factor behind falls in ACS peak demand seen in the last three winters.

Peak unrestricted demand on the GB transmission system in ACS (average cold spell) conditions, as projected by the system 'Users', increases from the provisionally estimated outturn of 61.4GW in 2007/08 to 67.3GW by 2014/15. This represents a growth rate of 1.3% per annum as indicated in Figure E.1 . Figure E.1 includes recent outturns together with the current User forecasts of ACS peak demand on the GB transmission system.

Figure E.1

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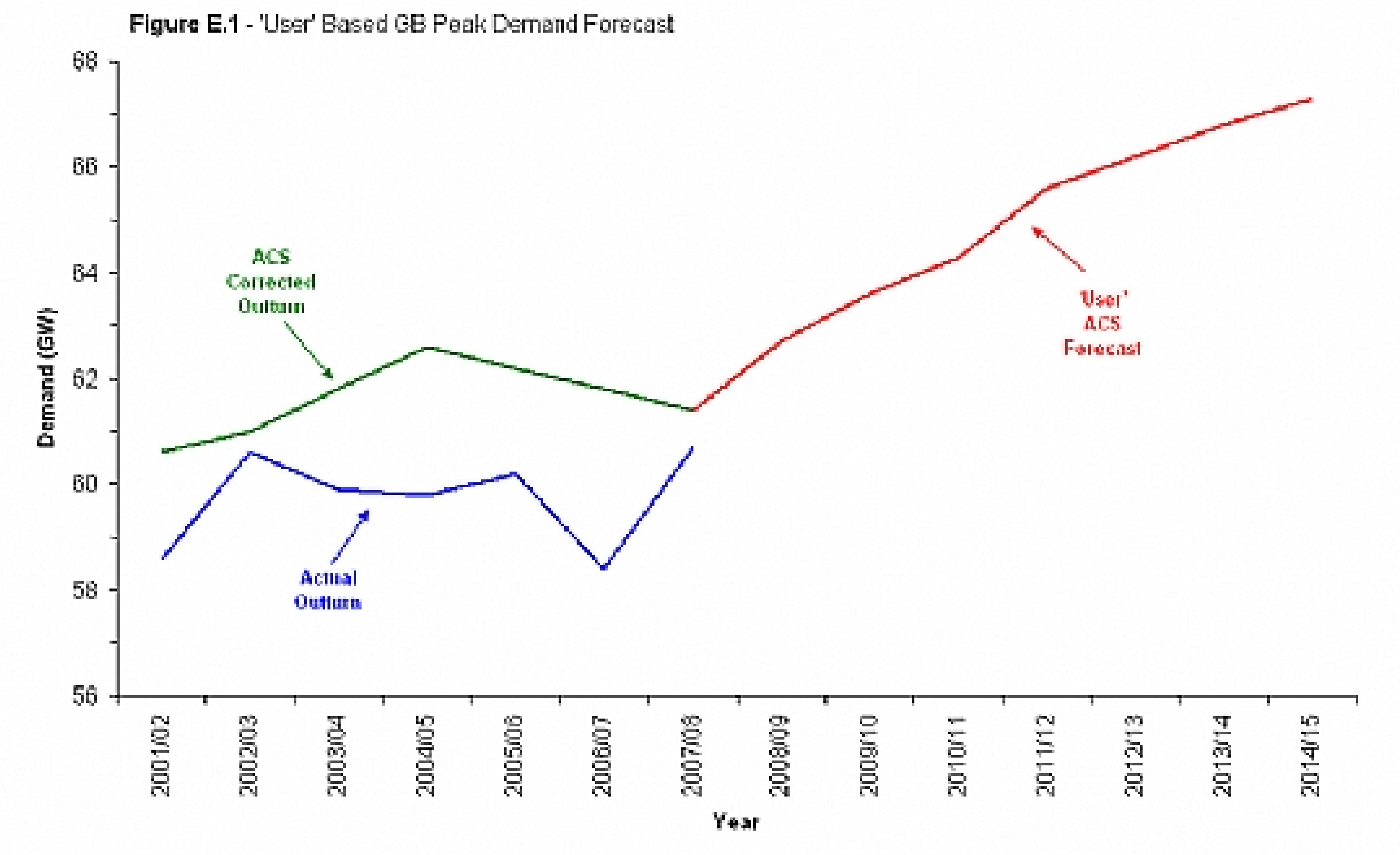

National Grid View of Demand Growth

We have also prepared our own ‘base’ forecast of peak demand and annual electricity requirements, together with 'high' and 'low' transmission system demand scenarios. For the 'high' and 'low' demand scenarios, combinations of favourable and adverse developments are assumed which yield high and low transmission system demands. For example, in the low scenario better progress towards the government's 2010 targets for combined heat and power and renewables is assumed, resulting in stronger growth in embedded generation. In contrast, in the high demand scenario circumstances bring a much slower take-up of such schemes and hence embedded generation. These assumptions, along with variations for other factors such as economic growth, result in a fairly wide range of outcomes for transmission system demand.

Figure E.2 compares our base, high and low demand forecasts with the User based forecasts. Under the ‘base’ forecast the ACS ‘unrestricted’ peak demand increases by 0.7% per annum, from 61.4GW in 2007/08 to 64.7GW in 2014/15.

Figure E.2

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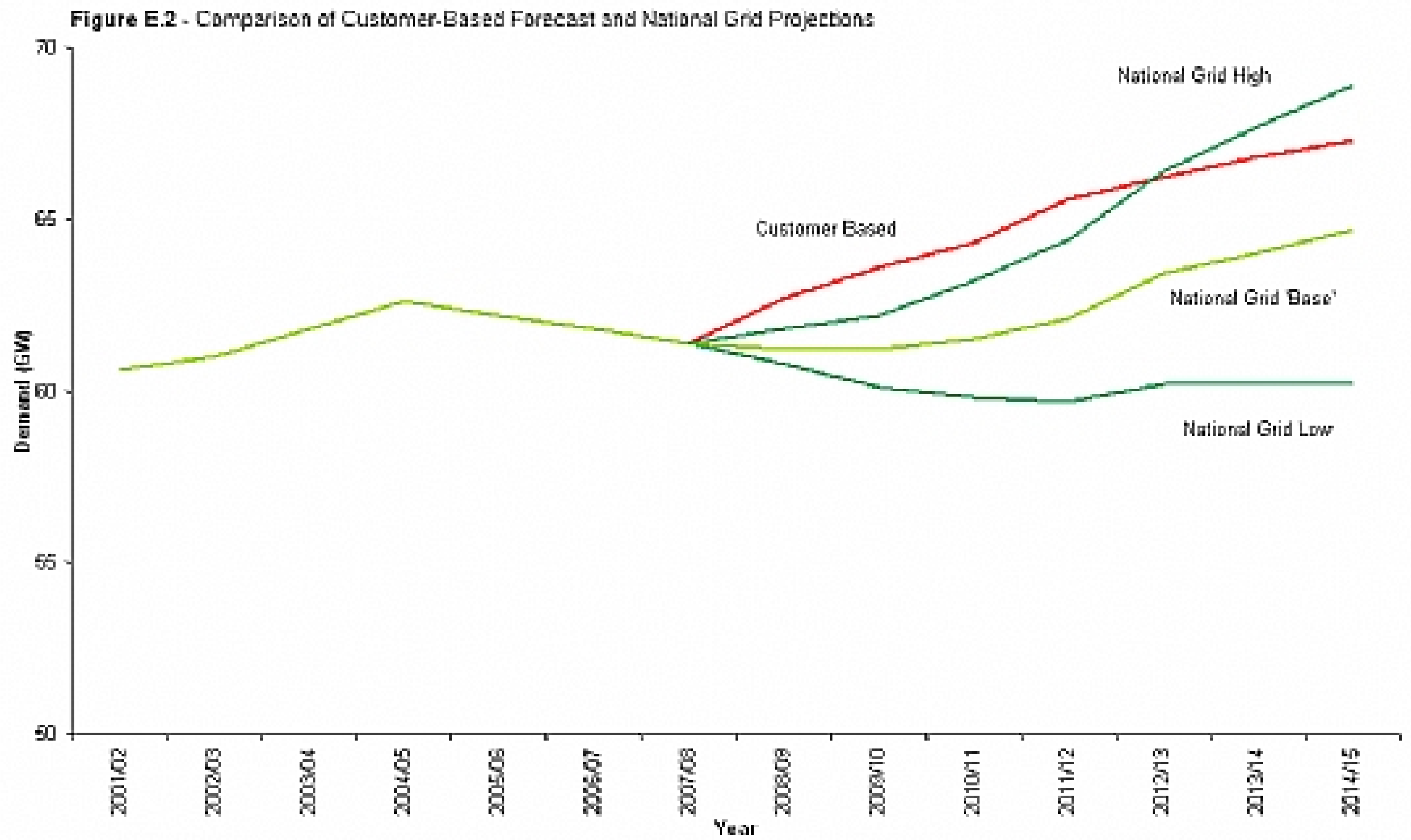

Throughout the period covered by this year's forecast, the User based forecast is more optimistic than National Grid's 'Base' forecast and is higher for the first few years than National Grid's High growth scenario projections. In the past, the User based forecasts have tended to underestimate the likely impact of embedded generation on system demand, which results in higher demand forecasts. In addition, it would appear that the User based forecasts do not make allowance for either the current high prices or the forward price curve, which again leads to the User forecasts being higher than those of National Grid, which do make such an allowance. Furthermore, the User based forecasts were submitted last June based on demand seen in 2006/07. The National Grid forecasts benefit from being based on demand seen in 2007/08, when peak demand fell for a third successive year against the background of ongoing high energy prices and a signs of a faltering economic outlook.

In general, the level and location of generation remains the major factor in determining the need for transmission reinforcements. However, in some areas (e.g. where demand exceeds generation) it is demand that can exert the greater influence and as such there is an increasing need for accurate demand forecasts in terms of both level and location.

Generation (See Chapter 3)

Chapter 3 presents information on all sources of generation, which are used to meet the ACS Peak GB Demand. Accordingly, this chapter reports on all power stations directly connected to the GB transmission system, whether they are classified as Large, Medium or Small, all directly connected External Interconnections with External Systems and all Large power stations, which are embedded within a User System (e.g. distribution system).

In recognition of the uncertainties associated with the future, unless otherwise stated the information presented relates to existing generation projects and only those proposed new generation projects which are classified as "transmission contracted".

Figure E.3

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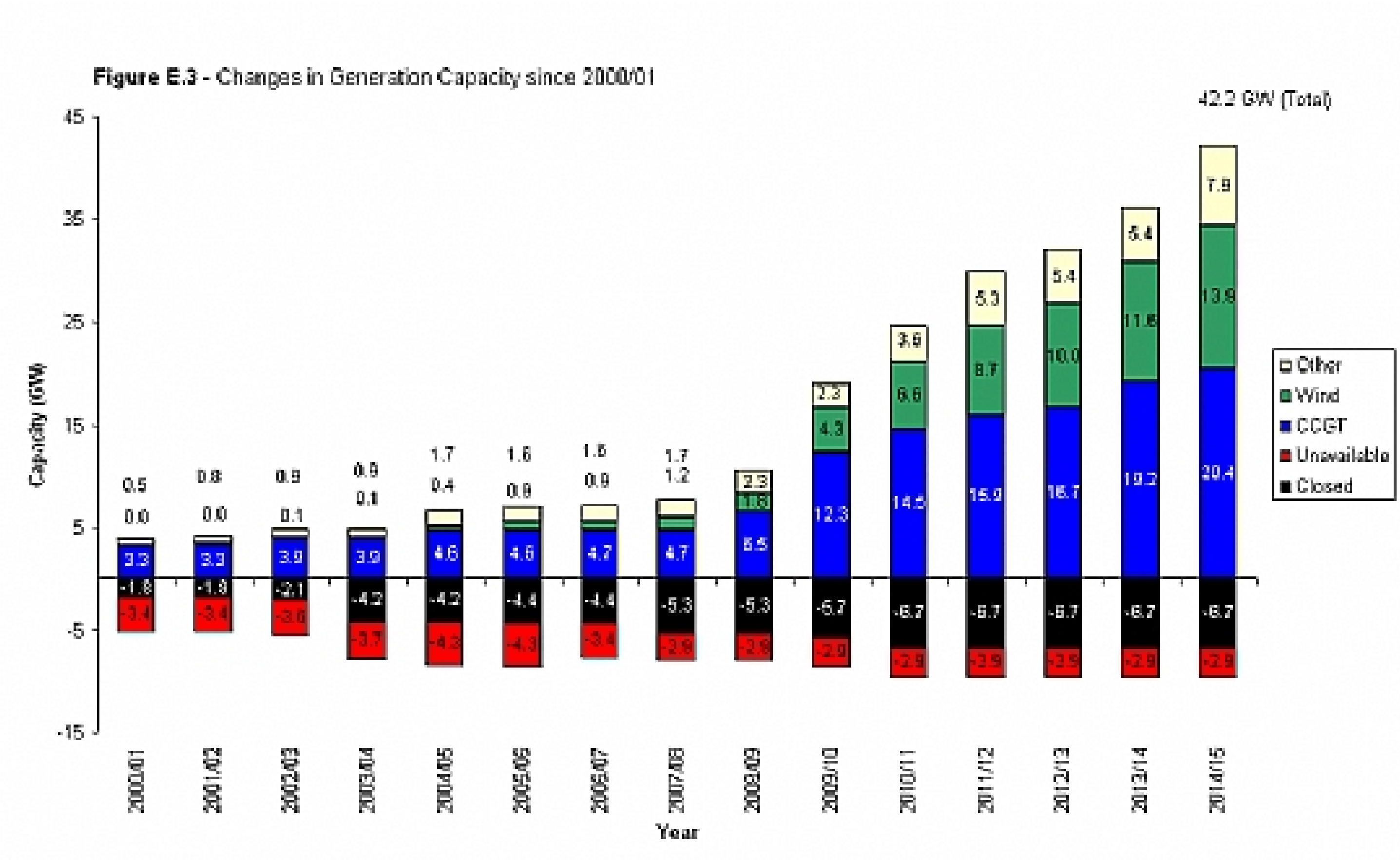

Figure E.3 illustrates the increase in generation capacity of plant since 2000/01. Notified reductions in capacity from plant closures and from plant being placed in reserve have been taken into account.

A feature of the future commissioning stream, shown in Figure E.3, is the relatively high level of activity in relation to capacity increases indicated for the year 2009/10 (8.3GW). In this year some 18% of the new capacity is from Wind generation (mostly onshore) which is to be located in Scotland. Similarly, some 12.6% of the new capacity is from Wind generation (mostly offshore) which is to be located in England & Wales. It is worth remembering, however, that, in the event, there may well be a more graded increase in activity over a number of years. The fact that a project is currently 'transmission contracted' is not an absolute guarantee that the project will proceed to completion since there are other factors, which may also influence that outcome (e.g. financing, fuel prices, planning consents etc.).

Figure E.4

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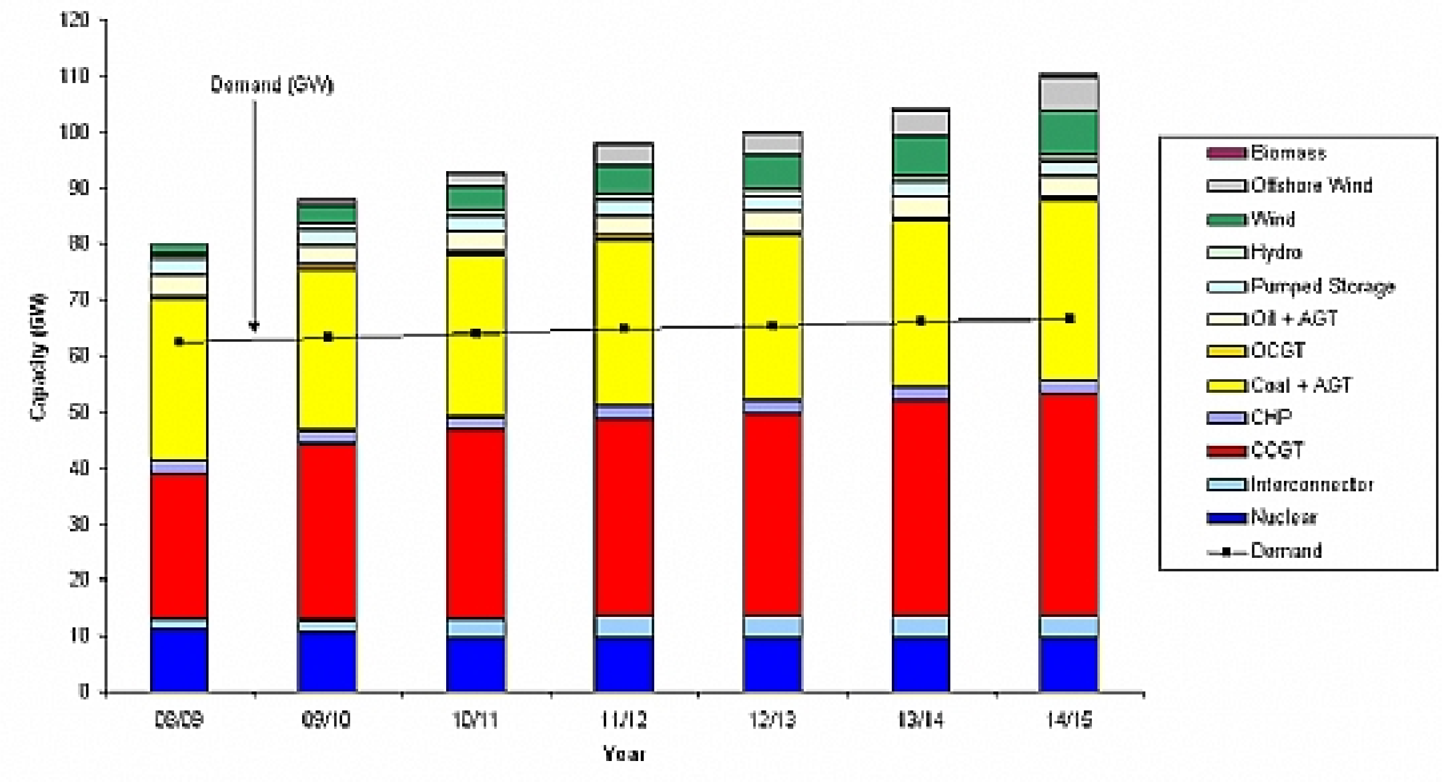

Figure E.4 - Existing and Planned Transmission Contracted Generation

Figure E.4 illustrates the generation mix over the period from 2008/09 to 2014/15 and includes both existing and proposed new transmission contracted generation. The aggregate power station capacity (TEC and/or 'Size of Power Station') rises from 79.9GW in 2008/09 to 110.1GW by 2014/15. This is an overall increase of 37.8% or 30.2GW over the period from the 2008/09 winter peak to the 2014/15 winter peak. This net increase is made of the following:

- an increase of 13.9GW in CCGT capacity (17.4%);
- an increase of 6.2GW in onshore wind generation capacity (7.8%);
- an increase of 5.9GW in offshore wind generation capacity (7.4%);
- an increase of 3.3GW in coal generation capability (4.2%);
- an increase of 1.8GW in new import capability (2.3%);
- an increase of 402MW in Biomass capacity (0.5%);
- an increase of 108MW in Hydro capacity (0.1%); and
- an increase of 108MW in Hydro capacity (0.1%); and
- a decrease of 1.45GW in Nuclear Magnox capacity (1.8%).

The largest change is due to the 13.9GW increase in CCGT plant capacity over the period. On this basis, the capacity of CCGT plant will overtake that of coal by 2009/10. By 2014/15, CCGT capacity will exceed coal capacity by 8.2GW and account for 36.0% of the total transmission contracted installed generation capacity.

The second largest increase is due to the growth in Wind generation, with onshore wind accounting for a 7.8% increase and offshore wind accounting for a 7.4% increase in overall capacity. Wind generation capacity (both onshore and offshore) is set to rise to 15.9GW by 2014/15.

The above capacities do not include the embedded Medium and Small generation and embedded External Interconnections with External Systems. The capacity of such embedded generation sources is the subject of Embedded and Renewable Generation.

It should be remembered that the above figures reflect the current contracted position and take no account of future uncertainty. As mentioned previously, it is reasonable to suppose that further new applications for power station connections will be received and, at the same time, some existing contracts may be modified or terminated and some existing power stations will close.

Embedded and Renewable Generation (See Chapter 4)

The focus of this chapter is on embedded Medium and Small power stations and embedded External Interconnections with External Systems. Embedded Large power stations are reported in the previous chapter.

Much of the existing and future embedded generation is either in the form of combined heat and power (CHP) projects or in the form of renewable projects. This chapter considers these two types of generation source, their growth, the implications for the GB transmission system and other related issues. In so doing, the chapter also reports on non-embedded renewable sources of generation (e.g. wind farms).

Consistent with the Government's drive for growth in renewable generation a high proportion of the 30.2GW of contracted future Large or directly connected generation projects are wind farms, either onshore or offshore. Around half of the projected 12.1GW growth in such wind farm installed capacity is located in Scotland. Overall, wind farm capacity, both embedded and directly connected, is projected to grow from 3.8GW in 2008/09 to 15.9GW by 2014/15.

National Grid recognises the importance of climate change issues and that the government's targets for growth in CHP and renewable generation are likely to lead to a continuing growth in embedded generation. It is important for National Grid to play its part in facilitating this growth by ensuring that any transmission issues arising are appropriately addressed. At present, no insurmountable transmission problems associated with accommodating new embedded generation projects are foreseen. Indeed, the properties of the interconnected transmission system are such as to facilitate embedded generation growth regardless of location.

Nevertheless, this does not preclude the potential need for reinforcements to the GB transmission system, the extent of which would be a function of the system location of the new plant. For example, the extent, and therefore cost, of GB transmission reinforcement would be a function of the volume of offshore wind located off the England and Wales coast or onshore wind located in Scotland.

National Grid's responsibility in the Balancing Mechanism is to balance generation and demand and to resolve transmission constraints. The persistence effect of wind (i.e. its output is naturally subject to fluctuation and unpredictability relative to the more traditional generation technologies) coupled with the expected significant diversity between regional variations in wind output means that, while the balancing task will become more onerous, the task should remain manageable. Provided that the necessary flexible generation and other balancing service providers remain available, there is no immediate technical reason why a large portfolio of wind generation cannot be managed in balancing timescales.

However, balancing costs would be expected to rise in line with the wind portfolio. Our estimation of balancing cost increases is between £5 and £7.50 per MWh of wind production for 2008/09. As the wind portfolio grows in size, we would anticipate these costs to tend towards a level of between £4 and £7 per MWh of wind production due to greater diversity and geographical location of wind generation of a larger wind portfolio. The increase in the estimates of costs from those reported in previous statements is linked to the rises in market prices for balancing services, in particular reserve and response

In the longer term, we do not think it likely that there will be a technical limit on the amount of wind that may be accommodated as a result of short term balancing issues, but economic and market factors will become increasingly important.

Plant Margin (See Chapter 5)

This chapter brings together information on generation capacity and forecast ACS unrestricted peak demand from previous chapters and examines the overall plant/demand balance on the GB transmission system by evaluating a range of potential future plant margins. The chapter concludes with a brief report on the related issue of gas and electricity market interaction.

It is emphasised that none of the plant margins presented in this chapter is intended to represent our forecast or prediction of the future position. The primary purpose is rather to provide sufficient information to enable the readers to make their own more informed judgements on the subject. The plant margins presented have been evaluated on the basis of a range of different backgrounds.

In view of the uncertainties, relating to the future generation position, three generation backgrounds have been considered. Each has been selected in recognition of the different level of certainty relating to whether the proposed new transmission contracted plant will, in the event, proceed to completion.

- Background 1: 'SYS Background' (SYS)

This background includes the existing generation and that proposed new generation for which an appropriate Bilateral Agreement is in place. The fact that a generation project may be classified as 'contracted' does not mean that the particular project is bound to proceed to completion. Nevertheless, the existence of the appropriate signed Bilateral Agreement does provide a useful initial indicator to the likelihood of this occurring.

- Background 2: 'Consents Background' (C)

A second useful indicator is whether plant has already been granted the necessary consents under Section 36 (S36) of the Electricity Act 1989 and Section 14 (S14) of the Energy Act 1976. This background includes all existing plant, that portion of plant under construction that has obtained both S36 and S14 consent where relevant, and planned future plant that has obtained both S36 and S14 consent where relevant. Any 'contracted' generation not already existing that requires S36 and S14 consent but has not obtained both is excluded from this background.

- Background 3: 'Existing or Under Construction Background' (E, UC)

This background is essentially the same as background 2 but excludes all future generation plant not yet under construction.

Figure E.5 compares plant margins derived from the customer based demand forecast with those derived from our own base view of future demand growth for the above three backgrounds; giving six sensitivities in all.

Figure E.5

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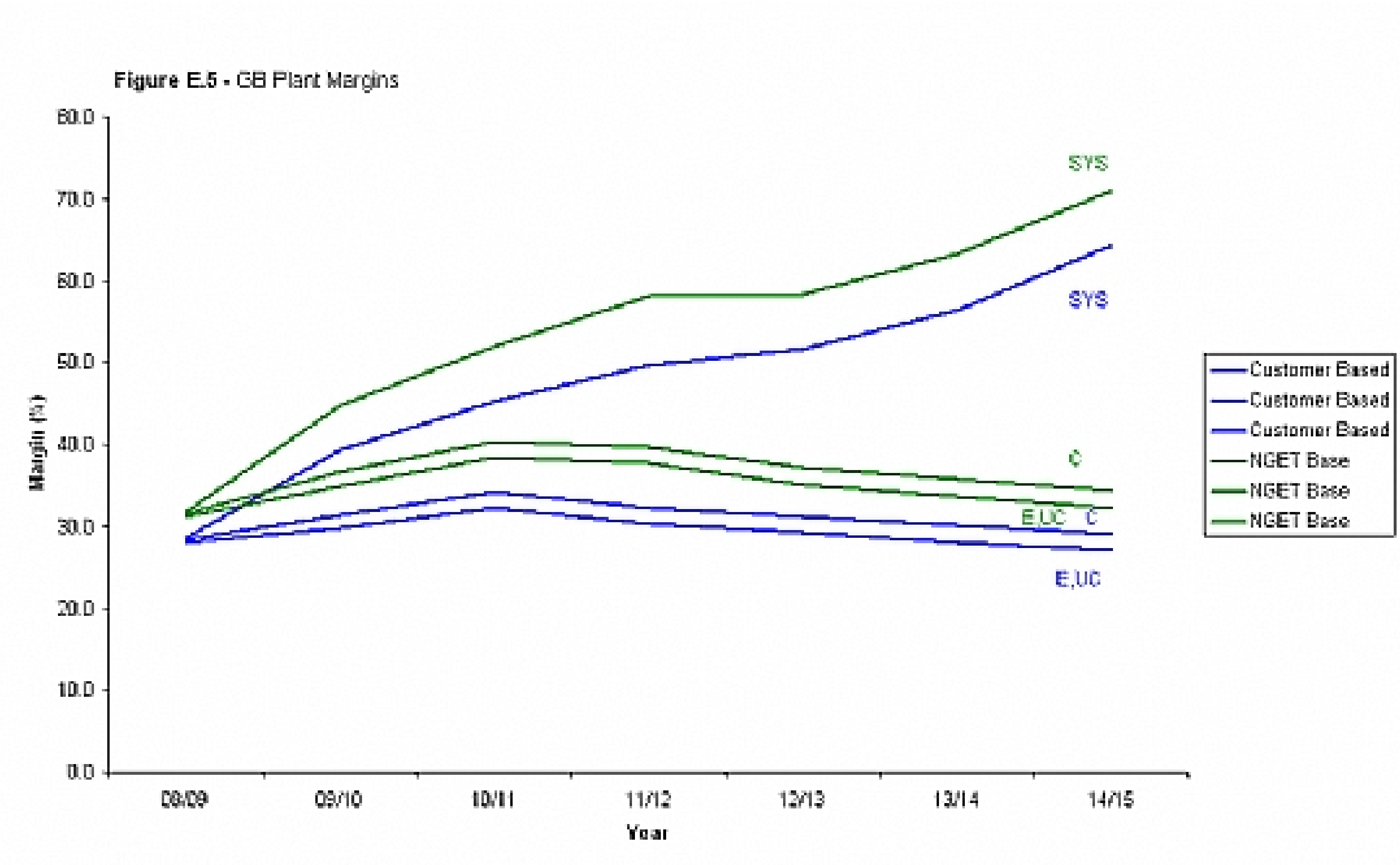

The main text considers a number of other factors, which can influence the value of plant margin. These include: as yet un-notified future generation disconnections (closures); the possible return to service of previously decommissioned plant (or the return to service of plant with TEC currently set at zero). The appropriate contribution towards the plant margin of generation output from wind farms is also considered as is the potential effect on the plant margin of exports (rather than imports) across External Interconnections and the sterilisation of generation capacity by virtue of its location behind a transmission constraint.

To illustrate this last point, additional plant margins have been calculated for a number of arbitrary assumptions relating to the availability of wind generation capacity at the time of the winter peak. Figure E.6 displays plant margins for wind capacity availability assumptions of 40%, 30% and 0%. The SYS background (i.e. with an inherent 100% wind capacity assumption) is also included for comparison.

Figure E.6

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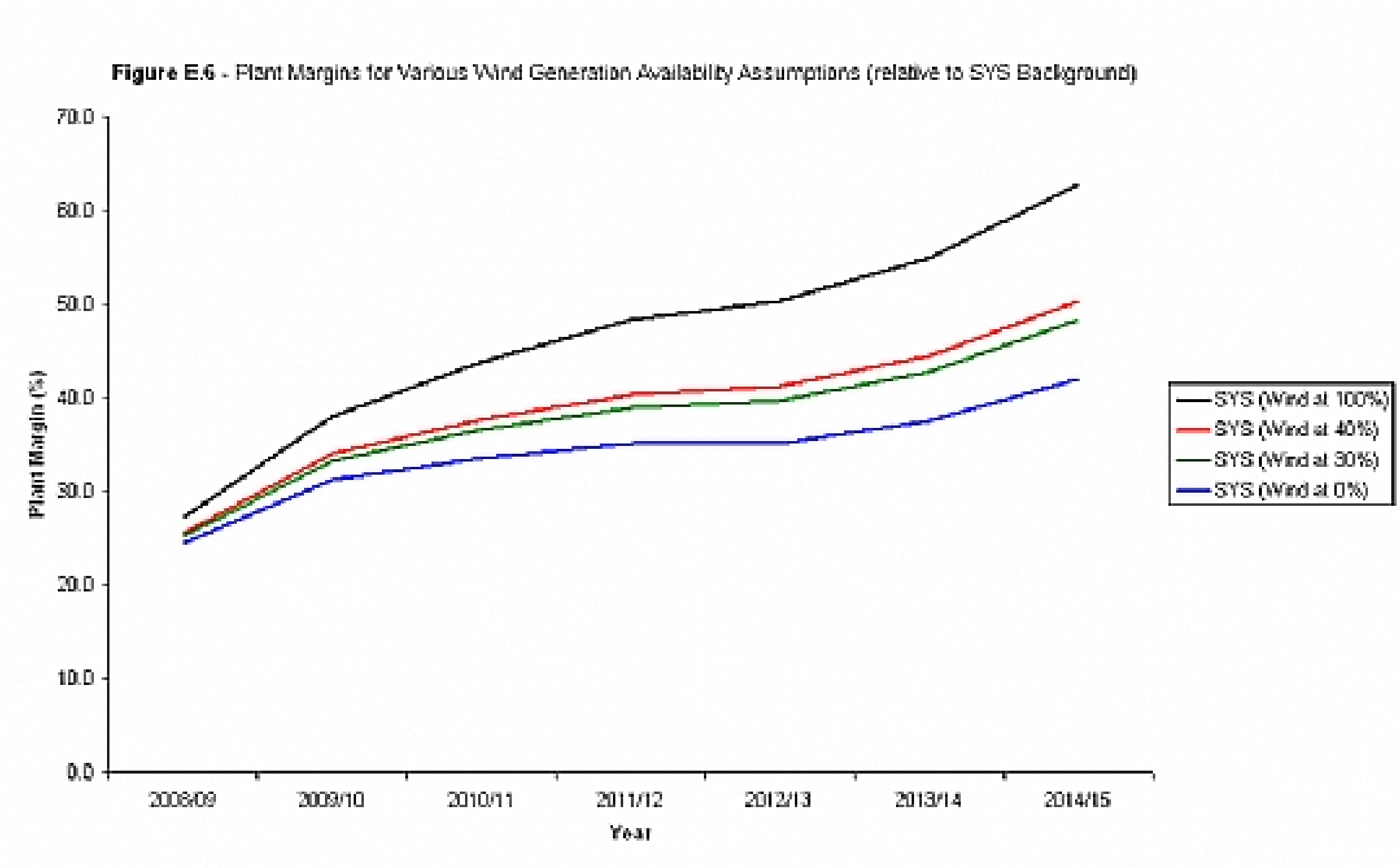

The margins displayed in Figure E.5 and Figure E.6 should not be taken at face value. The net result of the various uncertainties associated with the future plant/demand position is to produce a wide range of possible outcomes. In recognition of this, we have developed our own view of the likely developments into the future, which we consider alongside the SYS based backgrounds when undertaking our investment planning processes.

Transmission System Performance and Capability (See Chapters 6, 7 & 8)

The requirements placed on the transmission system depend on the size and geographical location of both generation and demand. However, it is generation that tends to exert the greater influence.

Figure E.7 summarises the Scotland (SHETL), Scotland (SPT), North, Midlands and South disposition of all transmission contracted generation (both existing and planned) in the years 2008/09 and 2014/15.

Figure E.7

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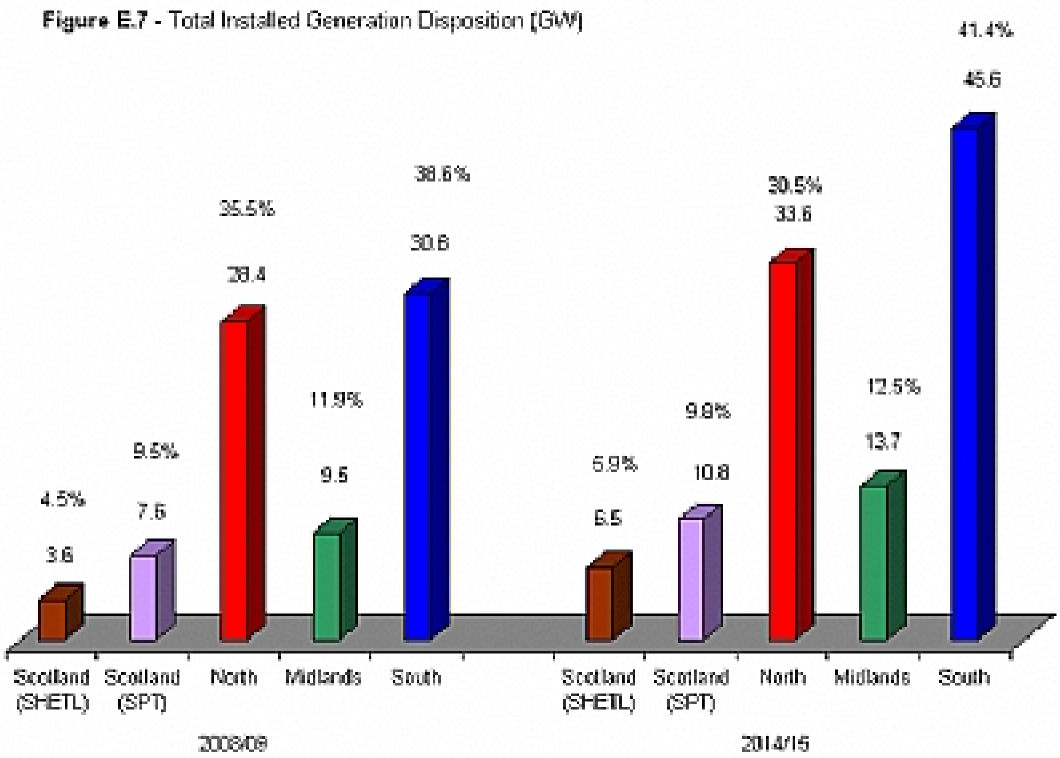

However, more importantly, it is the generation actually used in meeting the demand on the day, which determines the power flows at any given time. The 'GB Generation Ranking Order', which is explained in GB Transmission System Performance, is used to determine which generation is operated for the study purposes of this Statement.

By way of illustration, Figure E.8 shows the Scotland (SHETL), Scotland (SPT), North, Midlands and South disposition of installed generation (also shown in Figure 3.4) together with the regional ACS peak demand disposition. In both 2008/09 and 2014/15, the installed generation in Scotland (SHETL), Scotland (SPT), North and the Midlands exceeds demand, in some areas by a substantial amount. In the South, there is a more even balance in 2008/09 with demand exceeding installed generation by a small amount. However, by 2014/15 installed generation exceeds demand. Superficially, this would imply only relatively modest power transfers across the system.

Figure E.8

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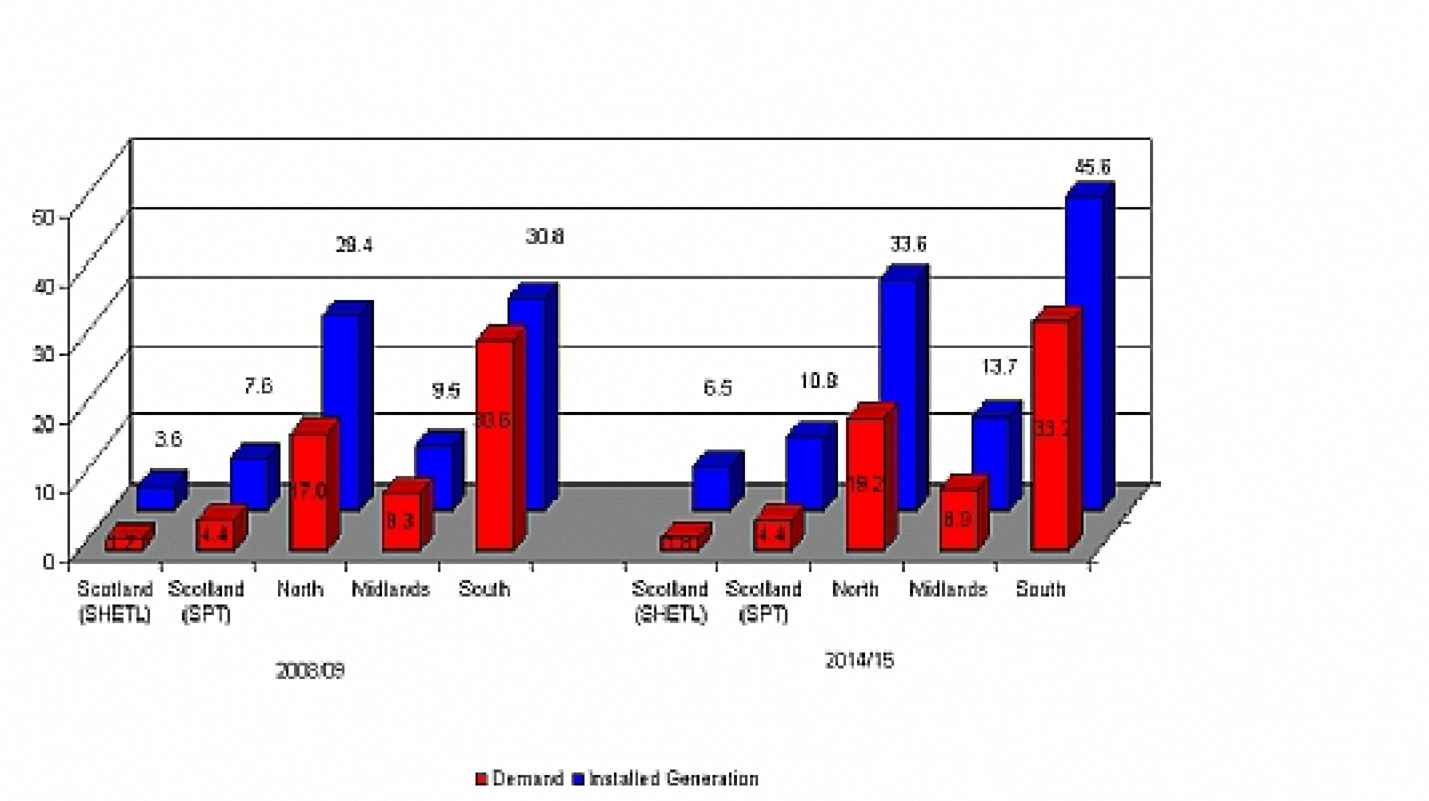

Figure E.8 - GB Zonal Plant/Demand Balance - Installed Generation

However, when the generation expected to be used to meet the demand is considered, a different picture emerges as illustrated in Figure E.9. Again generation in Scotland (SHETL), Scotland (SPT) and the North exceeds demand in both years. However, in the Midlands and South much of the generation becomes non-contributory (i.e. not used in meeting the demand) such that the demand exceeds generation, by a substantial margin in the South, in both years; implying higher power transfers from the northern parts of the system, through the Midlands to the South. The power transfers at the time of peak under the 'SYS background', are reported in more detail in GB Transmission System Performance.

Figure E.9

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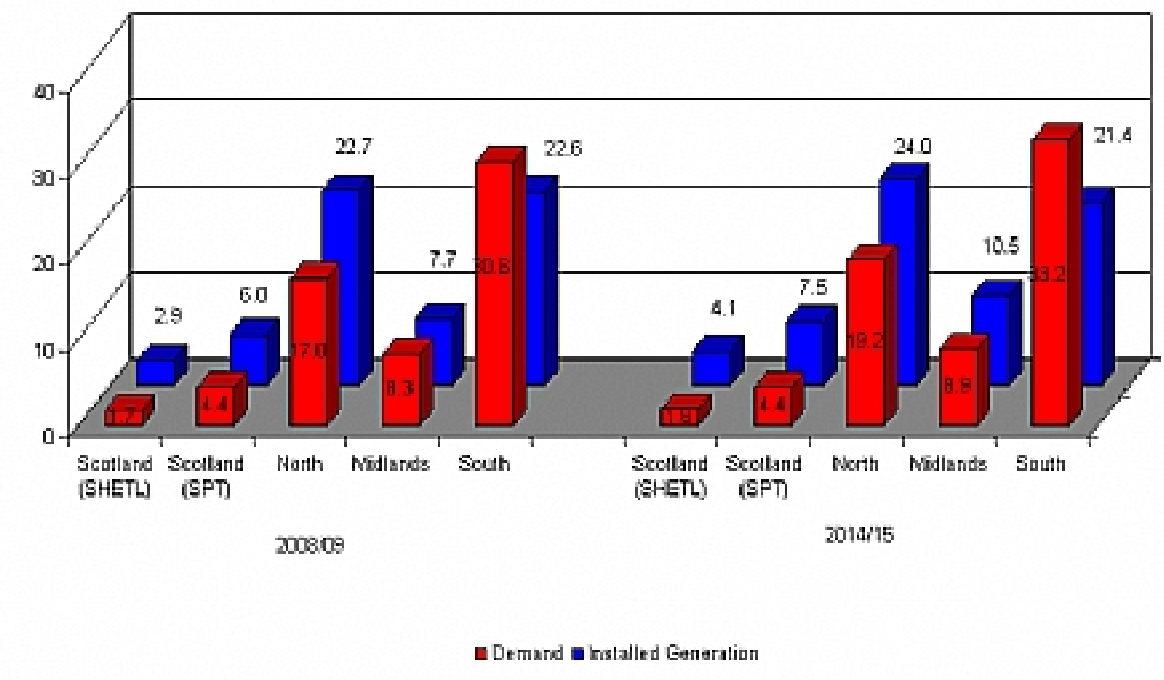
Figure E.9 - GB Zonal Plant/Demand Balance - Studied Generation



There are a number of boundaries on the GB transmission system that serve to illustrate the performance of the system. The main text of this Statement introduces 17 critical boundaries which, amongst other things, are used in determining the need or otherwise for transmission system reinforcement/investment. These boundaries relate to 17 SYS zones, which are also identified in the main text.

It should be noted that the 17 boundaries used in this Seven Year Statement serve as useful indicators of system capability but the apparent capabilities derived are dependent on the precise generation and demand background used. Table 7.3, of the main text, provides a useful reference overview of the power transfers, under the 'SYS background', across each of the 17 main system boundaries. The transfers are based on the expected contributory generation plant rather than installed capacity.

However, it is recognised that the 'SYS background' does not necessarily represent the most likely outturn. There is uncertainty associated with the demand forecasts and in particular with future generation developments. These factors will affect future power transfers, transmission system capabilities, the need or otherwise for transmission system reinforcements and the opportunities for making new or further use of the transmission system.

In view of this, we have presented the 'SYS background' transfers and capabilities against the backdrop of a range of probabilistic transfers. These probabilistic transfers reflect our current views on the likelihood of the various generation and demand uncertainties. This presentation is intended to provide a more meaningful view of future transfers, promote a better appreciation of the future uncertainty we face in planning our system and enable the reader to make more informed judgements on the opportunities for making new or further use of the transmission system.

The main text of this Statement (see Transmission System Capability) includes probabilistic transfers for all 17 boundaries. As an example, the results for two key boundaries are given in Figure E.10 and Figure E.11. With the predominant high north to south power flows seen on our system, these two boundaries (i.e. the SPT to NGET boundary and North East and Yorkshire boundary) are particularly important.

Figure E.10

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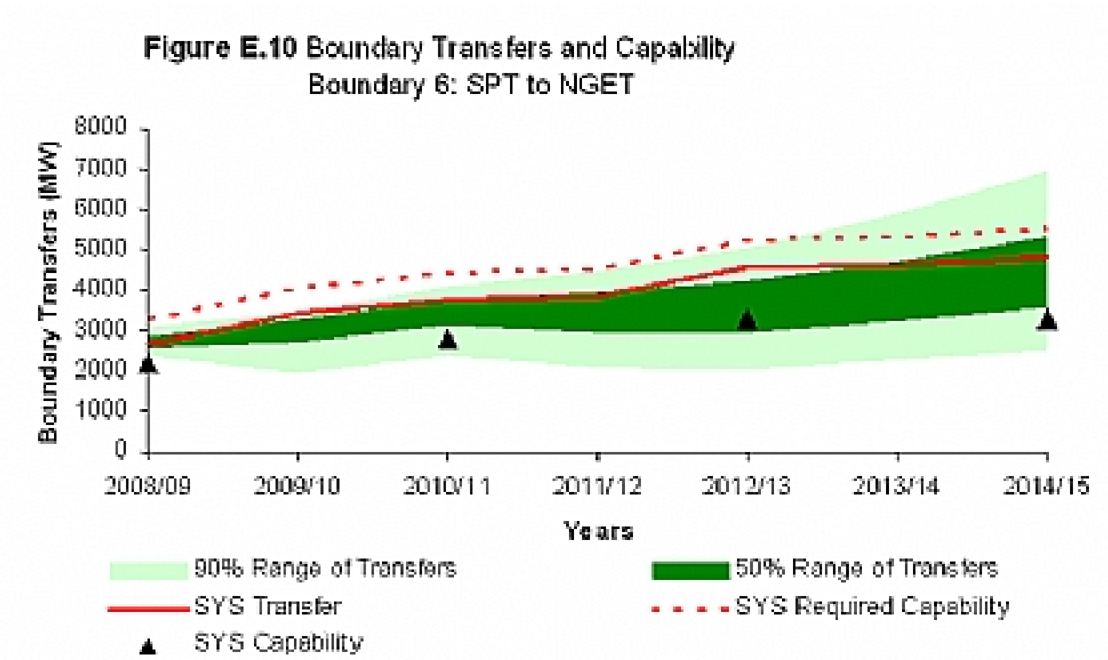

Figure E.11

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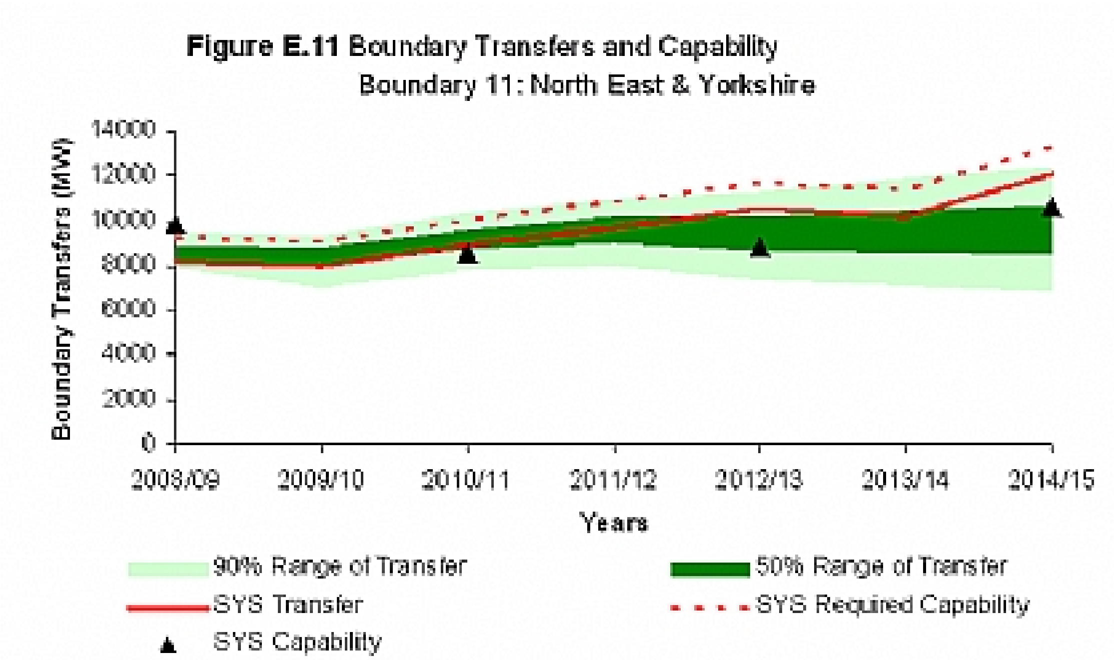

Figure E.10 and Figure E.11 show the boundary transfer (SYS Transfer), required capability (SYS Required Capability) and actual capability (SYS Capability); all derived on the basis of the 'SYS Background'. These are displayed against a backdrop (shaded areas) of our current view of the probable transfer range.

The required capability is simply the boundary transfer enhanced by an allowance for security (referred to as the Interconnection Allowance) to take some account of variations in weather, generating plant availability and demand forecasting error either side of the boundary.

For the SYS Capability, two types of capability have been analysed: thermal and voltage. Where the voltage capability is less than the thermal capability, the voltage capability is given. The boundary capability may be further reduced at other times for stability reasons.

Turning now to the probabilistic transfer ranges (shaded areas); the darker shaded central band extends (on the vertical axis) from the 25th to the 75th percentiles of the range of probabilistically derived transfers, and thus includes 50% of all such transfers across the boundary at the time of system peak. The wider area, encompassed by the lighter shaded bands runs from the 5th to the 95th percentile and thus, together with the dark band, includes 90% of transfers. The remaining 10% lie outside the shaded range. The fan of probabilistically derived transfers can be compared with the deterministic planned transfer for the single deterministic SYS background.

It does not follow that the probabilistic transfer arising from a background considered to be likely will necessarily be captured within the envelope range shown on the diagram. Nor does it follow that all the most commonly occurring transfers have highly probable backgrounds. In our Generation Uncertainty Model (GUM), all backgrounds are equally probable. Nevertheless, the range of transfers displayed in the fan diagram does provide a very useful indicator of the most probable future planned transfer across the boundary given the possible combined effects of the various sources of generation and demand uncertainty. GUM can then be interrogated to reveal the details of any background underlying any transfer (point on the fan diagram) for further detailed analysis.

In the example given in Figure E.10, the SYS Planned Transfer lies towards the top of the probabilistic range of Planned Transfers while the SYS capability is in the lower part. There is hence a chance of lower peak flows than suggested by the SYS background; however, significant reinforcements will nevertheless be required in the very near future to facilitate even the lower parts of the range of probabilistic transfers.

In the example given in Figure E.11, over the latter part of the planned period, the SYS Planned Transfer lies well within the range of the probabilistic transfers. At the same time, the SYS capability falls to the lower end of the probabilistic range which indicates a high probability of further reinforcements being required.

This presentation, which is reported in detail in the chapter on Transmission System Capability in the main text, is useful for demonstrating the inadvisability of committing transmission reinforcements too far ahead of need and also for illustrating future opportunities. Please note that, whilst the 'SYS capabilities' displayed on Figure E.10 and Figure E.11 are appropriate for the 'SYS background' and 'SYS transfers', they do not necessarily correspond to the backgrounds covered by the probabilistic transfer range. Each background captured within the probabilistic analyses will have a unique set of boundary transfers and boundary capabilities.

The following provides a summary of the key indications for the future development of the GB transmission system taking account of both the probabilistic transfer levels and the boundary flows for the 'SYS background':

- The major north to south boundaries B1 (SHETL North West Export), B2 (North to South SHETL), B4 (SHETL to SPT), B5 (North to South SPT), B6 (SPT – NGET), B7 (Upper North), B11 (Northeast & Yorkshire) and B16 (Northeast, Trent & Yorkshire) all show large increases in power transfers during the period of the SYS. This increased power export through Scotland and into England is primarily due to contracted renewable energy developments throughout Scotland;
- For B8 (North to Midlands) and B9 (Midlands to South), power transfers gradually increase as new generation connects in the North East;

- Central London import (B14) show a trend of steadily increasing transfers reflecting the increasing demands and lack of new generation projects within this zones;
- West Midlands import (B17) show very little change due to few generation changes and gradually increasing demand;

There is a general trend with reducing transfers across South & Southwest import (B12), the South Coast import (B10) and South West import (B13) throughout the SYS period, reflecting new plant that might be expected to commission in the South and Southwest in line with present contractual positions.

In view of the uncertainty associated with the ‘SYS background’, the timing of the construction of infrastructure reinforcements is managed such that investments are made to well defined system requirements. This means that, generally, construction is deferred as far as is practicable to avoid undertaking investments that may turn out to be unnecessary, e.g. where transmission contracted generation does not in the event proceed. At the same time, in recognition of the individual TOs' obligations relating to the facilitation of competition, flexibility is planned into the GB transmission system such that it does not unduly inhibit the development of future projects. However, we do ensure that we can provide an efficient, co-ordinated and economic system, compliant with the security standards, as required by the Electricity Act 1989 and the Transmission Licences.

A number of significant connection and infrastructure reinforcements to the GB transmission system are currently planned. In addition to the construction of new overhead lines and substations, these include the use of devices that not only maximise the use of the existing transmission system thereby limiting environmental impact, but also enable rapid network modifications to meet changing system requirements. To this end we use, amongst other things, quadrature boosters, which are capable of being relocated at a later date together with Relocatable Static Var Compensators (RSVCs). We have also authorised the reprofiling (i.e. retensioning of the overhead line circuits to reduce the sag between towers) of strategic overhead line circuits to increase the permitted operating temperature and thereby increase their load carrying capability.

By exploiting the capability of the existing transmission system through the installation of quadrature boosters and reactive compensation and overhead line conductor re-profiling, we will continue to maximise the use of our existing lines.

Opportunities for New Generation and Demand (See Chapter 9)

Generation Opportunities

In the generation context, opportunities are interpreted as the ability to connect new generation without an associated need for major transmission reinforcement, which could in turn lead to delays caused by the need for Planning Consent and possible Public Inquiries.

Figure E.12 separates the 17 SYS Study Zones into five opportunity groups, namely: VERY LOW, LOW, MEDIUM, HIGH and VERY HIGH. The figure also provides an indication of the capacity of new generation that can be accepted in the individual zones of each opportunity group without the need for major transmission reinforcement.

It does not follow that all the generation capacity within an opportunity group could be located at one site within a zone. In some zones, for example the London Zones, a considerable spread would be necessary. Nor does it follow that the capacities indicated for each zone within an opportunity group could be accepted together. Moreover, please note that there is little opportunity for further connections in the northern zones.

Whilst levels of opportunity have been attributed to the five opportunity groups, it does not follow that the full opportunity capacity indicated could be used up without further detailed consideration. For instance, whilst the Central South Coast (zone 16) falls into the ‘medium opportunity category, any additional development might require major transmission reinforcement.

The proposed connection of a significant volume of new transmission contracted generation in the SHETL area, substantially made up of wind farms, is dependant on the completion of transmission reinforcements, including the proposed Beauly/Denny transmission reinforcement. The Beauly/Denny reinforcement is included as part of the SYS background for commissioning by 2012/13. However, elements of this reinforcement are currently the subject of a Public Inquiry and, consequently, the final commissioning date may vary, which would impact the opportunities.

The analyses of boundary power transfers show that, with the material increase in new generation (30.2GW) planned for the next seven years, the resultant power flows through the Scottish and English grid systems to the South would require significant reinforcement. On this basis, it would be unlikely that any new applications for generation projects in Scotland or the north of England can be accommodated within the seven year period covered by this Statement. However, the proposed new transmission access rules (see below) are expected to change the emphasis by providing an opportunity for earlier transmission access for new generation projects.

The above guidance is necessarily general and emphasises the need to consider individual prospective generation developments on their merits at the time of application. A message arising from the guidance is that new generation located in the South is less likely to incur the need for major inter zonal transmission reinforcement and possible time delays than generation located in the North.

Notwithstanding the above opportunity messages, we will continue to comply with our licence obligations to make offers and will endeavour to meet our customers requirements including those relating to timescales.

Figure E.12

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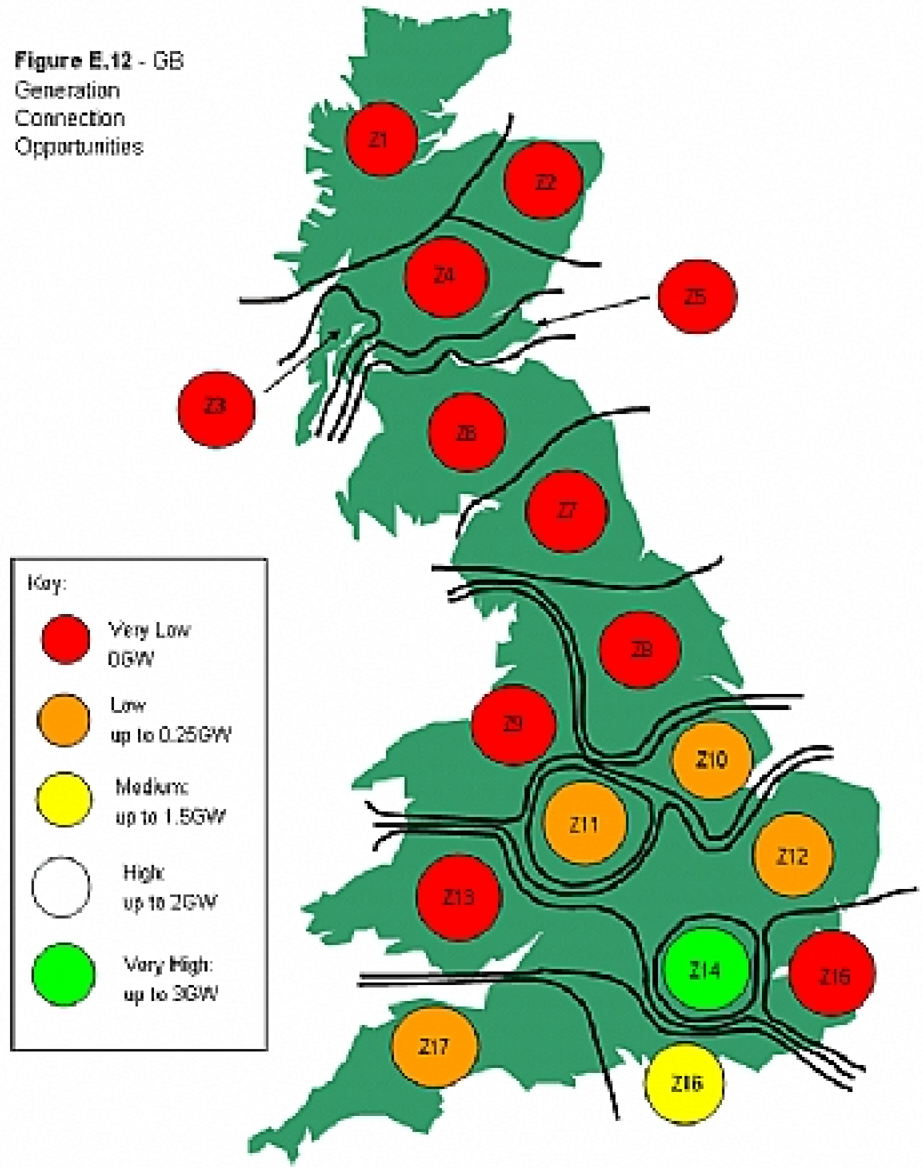


Figure E.12 - GB Generation Connection Opportunities

Transmission Access Review

The current transmission access review is also relevant in the context of future opportunities for generation access to the GB transmission system.

This review was announced in the Government's Energy White Paper 2007 and is being led by Ofgem and the Department for Business, Enterprise and Regulatory Reform (BERR). The review covers the present technical, commercial and regulatory framework for the delivery of new transmission infrastructure and the management of the existing grid capacity to ensure that they remain fit for purpose as the proportion of renewable generation on the system grows.

Access to the GB transmission system is provided through arrangements with National Grid, acting as GBSO, under the Connection and Use of System Code (CUSC). The CUSC sets out the contractual framework for connection to, and use of, the GB transmission system. The CUSC has applied across the whole of Great Britain since BETTA was introduced on 1 April 2005.

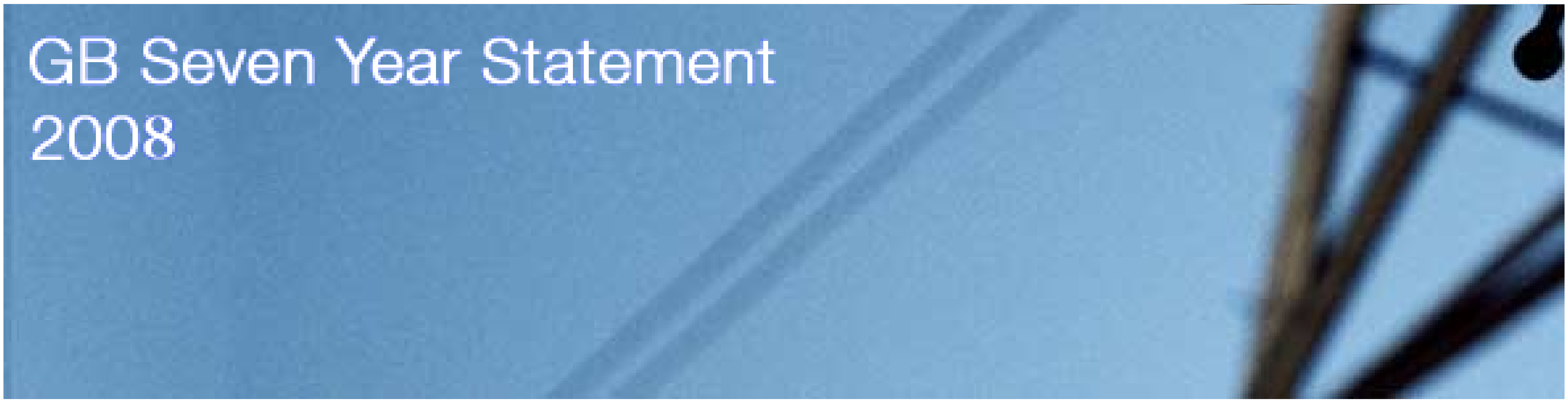
The review includes the consideration of different models of transmission access, and to support this part of the review, National Grid has raised a suite of CUSC amendments and charging methodology modifications which could be used as building blocks to implement a number of different access models. Each of these models could be expected to provide an opportunity for earlier transmission access to new generation projects.

Demand Opportunities

New demand of up to 150MW could be connected within most zones without requiring major transmission reinforcement.

An exception might be the introduction of such a step-change of load at certain points within or around some southern areas. For example, the London area has a large demand; approaching one tenth of the GB system peak demand. The London boundary is close to its thermal limit although planned work will ensure continued compliance. A large step-change in demand might, dependent on exact location, require major reinforcement. Each case again needs to be considered on its own merits.

nationalgrid



Introduction to Chapter 1

The 2008 Great Britain Seven Year Statement (GB SYS) is the fourth to be published by National Grid Electricity Transmission plc (NGET), acting in its role as Great Britain System Operator (GBSO). National Grid Electricity Transmission plc is a member of the National Grid plc ("National Grid") group of companies.

When the British Electricity Trading Arrangements (BETTA) were introduced on 1 April 2005, National Grid became required to produce a single Seven Year Statement covering the whole of the Great Britain (GB) transmission system (i.e. the GB SYS). The Statement is produced in accordance with the obligations placed on National Grid, acting as GBSO, under the System Operator Standard License Condition C11 of National Grid's Transmission Licence. Amongst other things, that condition requires that National Grid publish a GB SYS on an annual basis and in a form approved by the Authority. The two Scottish transmission licensees, Scottish Power Transmission Ltd ("SPT") and Scottish Hydro Electric Transmission Ltd ("SHETL"), are required to assist National Grid in preparing each GB SYS pursuant to their licence obligations.

A key purpose of the GB SYS is to assist existing and prospective new Users of the GB transmission system, whether generators or suppliers of electricity, in assessing the opportunities available to them for making new or additional use of the GB transmission system in the competitive electricity market in Great Britain. Whilst the text in this Statement reflects new terminology, institutional, contractual and other changes relating to BETTA and other subsequent recent developments, the subject matter presented remains much the same as that of each of the previous Statements.

GB SYS Structure

For those readers who are unfamiliar with the current market structure, including the British Electricity Trading Arrangements, Market Overview provides a high level summary of these and a number of related issues such as governance, institutional and contractual arrangements.

The chapter entitled Embedded and Renewable Generation has been included in recognition of the current and potential future growth in embedded and renewable generation given the government's targets for generation from combined heat and power (CHP) and renewable sources.

The Statement presents a wide range of technical and non-technical information relating to the GB transmission system in a series of chapters and appendices. The subject matter includes: projected demand; generation; embedded generation (as mentioned above); plant margins; the characteristics of the existing and planned GB transmission system; its expected performance (including power flows; loading, fault levels and its capability to transfer electricity across the system); opportunities and the electricity market (also mentioned above). As far as possible each chapter is self contained with appropriate text, tables and figures.

The nomenclature of the table heading reflects the chapter to which it belongs e.g. Table 3.4 is the fourth table in the chapter entitled Generation . In some cases where a table contains a large amount of material of a general nature or where the figures are particularly large, then those tables and figures have been included in an appendix and referenced with a prefix associated with the relevant appendix e.g. Figure A.1.1 is included in Additional Figures and Table B.1a is included in Data.

Additional Figures , Data , Power Flows , Fault Levels and Grid Supply Point Demand Data present technical information relating to the GB transmission system and its performance in diagrammatic and tabular form. This material is introduced and referenced in the main text.

Confidentiality of Information

Much of the data included in this GB SYS is provided by Users and potential new Users of the GB transmission system other than National Grid and the two Scottish Transmission Licensees. There are certain obligations placed on ourselves (e.g. Clause 6.15 of the Connection and Use of System Code) regarding the use of such data with respect to 'disclosure of commercial interests'.

In view of this, the customer demand and generation information listed in the Statement and used to produce the forecast power flows is generally restricted to that for which an appropriate Bilateral Agreement has been entered into between the relevant Transmission Licensee and the customer. Speculative new projects, potential closure of existing stations or other developments, which may have been discussed with the relevant customer, are not included without the agreement of the customer. In this Statement, present and future customer developments for which appropriate Bilateral Agreements have been entered into are generally referred to as 'transmission contracted'.

Similarly, unless otherwise stated, the transmission network presented includes developments needed for the 'transmission contracted' demand and generation projects and excludes transmission works that may be needed to accommodate prospective (i.e. not as yet the subject of an appropriate Bilateral Agreement) new or modified projects for demand or generation.

It should be noted that some proposed transmission developments included in the background may also be subject to planning consent as may the transmission contracted demand and generation projects.

The GB SYS Background

Unless otherwise stated, the network analyses (e.g. the illustrative power flows, the loading on each part of the GB transmission system and the fault levels) presented in this GB SYS is based on a system background referred to as the "GB SYS Background", which is often shortened to "SYS background". The SYS Background is made up of the following:

(i) Demand Background: The "customer-based" demand forecasts rather than the "NGET based" GB demand forecasts. Both sets of demand forecasts are reported in Electricity Demand;

(ii) Generation Background: Unless otherwise stated the existing generation and that proposed new generation for which an appropriate Bilateral Agreement (i.e. BCA, BEGA or BELLA) is in place. This is detailed in Generation Capacity; and

(iii) Network Background: The existing transmission network and those future transmission developments, which are considered 'firm' in that they are least likely to be varied or cancelled as the needs of the evolving system change. Such transmission developments will include, but will not be restricted to, those schemes, which have been technically and financially sanctioned by the relevant Transmission Owner.

Other schemes, which may not yet be financially sanctioned by the relevant Transmission Owner, but which are nevertheless considered 'firm', may also be included. Such transmission reinforcement schemes would, nevertheless, be associated with "Transmission Contracted" generation projects included in the generation background of (ii) above and may have an appropriate Transmission Owners Construction Agreement (TOCA) and Transmission Owners Reinforcement Instruction (TORI) in place.

Transmission network information is detailed in GB transmission system.

Please note that the terminology used in the above background descriptions is explained in the Glossary.

The "SYS background" is internally consistent. For example, the transmission background of item (iii) above includes all transmission connection developments cited in the relevant connection agreement as being necessary to connect the generation contained in the background of item (ii) above. The "SYS background" does not include any transmission development that may be needed to accommodate prospective projects of new generation or demand, which do not have an appropriate Bilateral Agreement in place on the Data Freeze Date of 31 December 2007, and which are therefore not reported under item (ii) above. The connection dates used, reflect the contracted position.

It is recognised that the above ‘SYS background’ does not necessarily represent the most likely outturn. For example, it is reasonable to suppose that new applications for power station connections will be received, some power stations will close and some contracts for generation projects may be modified or terminated. This may lead to the need to vary the planned future development of the transmission system to meet changing system requirements. Whilst the main body of this Statement is based on the ‘SYS background’, future uncertainties and their effect on system performance, the need for transmission reinforcement and resultant opportunities have also been considered in the relevant chapters.

In view of the abovementioned uncertainty associated with the need for future developments, the timing of construction of reinforcements to the Main Interconnected Transmission System (MITS) is managed such that investments are made to well defined requirements. Accordingly, in some cases, reinforcement of the MITS may be deferred to the last moment to avoid the risk of undertaking investments which may, in the event, turn out to be unnecessary. In view of this, the "SYS background" may not necessarily contain all the MITS reinforcement schemes required for compliance with the Licence Standard. However, this Statement does include an indicative list of future reinforcement schemes, which could be used where necessary to maintain compliance with the Licence Standard.

Further Information

The information provided in this Statement will, amongst other things, enable existing customers and potential new customers to identify general opportunities for new, continued and further use of the GB transmission system. When a customer is considering a development at a specific site, certain additional technical information in relation to that site may be required which is of a level of detail that is inappropriate to include in a document of this nature.

In such circumstances the customer may contact the appropriate Transmission Licensee, initially the relevant technical contact (address in Contact Us), who will be pleased to arrange a confidential discussion, and the provision of such additional information relevant to the site under consideration as the customer may reasonably require.

Customers wishing to make an Application for an appropriate Bilateral Agreement to the Connection and Use of System Code (CUSC) and wishing to discuss the possible terms of such an agreement or obtain an application pack, should initially contact the relevant commercial contact (address in Contact Us).

Other useful addresses together with a list of documents produced by ourselves and others which readers may find helpful, can be found in Contact Us and References.

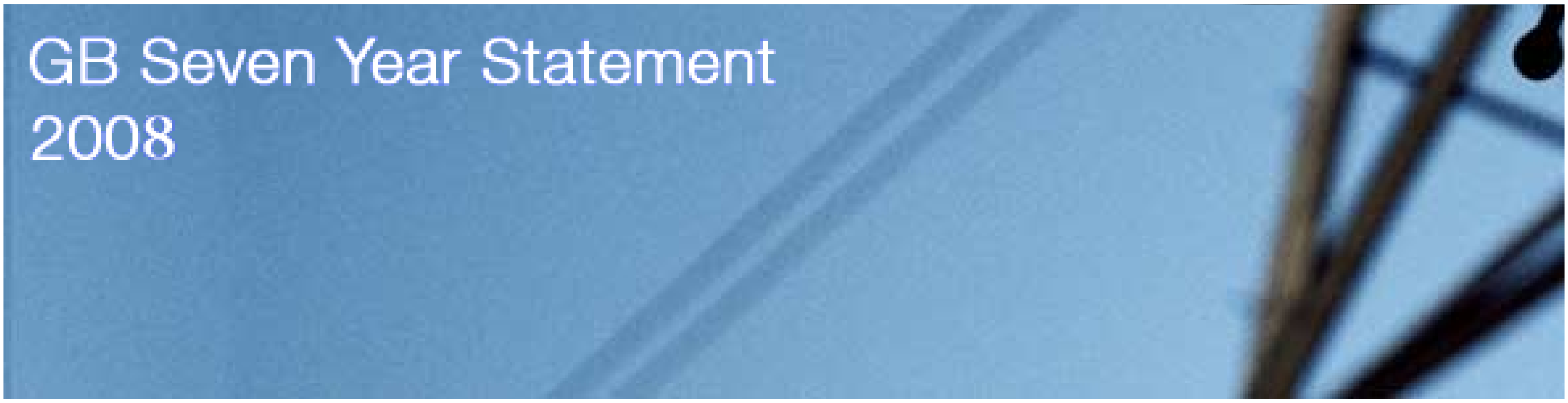
Quarterly Updates

The main Statement is supplemented by a set of Updates. The first Update to this 2008 GB SYS will be issued shortly after publication of this main Statement and will report on changes notified since the data freeze date. As in previous years, further Updates will be issued on a regular basis (approximately three month intervals). Quarterly Updates provide a brief summary of the key changes since the main Statement was produced. No new simulations are carried out for the Updates but an estimate is made of the effect of the changes on the various issues covered by the Statement.

Data Freeze Date

The 'Data Freeze Date' for all information included in this Statement reflects, unless otherwise stated, the extant position on **31 December 2007**. Subsequent developments are reported in the Quarterly Updates.


G.B. SYS. FIGURE A.1.1
2008/09 TRANSMISSION SYSTEM
WITH LARGE POWER STATIONS
AS AT 31st DECEMBER 2007
THE SHETLAND ISLANDS
Plant Type
Existing
NUCLEAR
COAL
OIL & OCGT
CCGT/CHP
HYDRO/PUMPED
STORAGE
WIND
OTHER
SUBSTATIONS:
SCOTTISH HYDRO-ELECTRIC
TRANSMISSION
SP TRANSMISSION LTD.
NGET



Introduction to Chapter 2

This chapter presents forecasts of electricity demand to be met from the GB transmission system. The main forecasts are based on information submitted by Customers (transmission system 'Users') who take, or propose to take, electricity from the high voltage system. These 'User' based forecasts, together with the generation and transmission backgrounds described in the chapters on Generation and GB Transmission System respectively, form the basis of the SYS background upon which most of the studies presented in this Statement are based.

NGET's own 'base' forecast of electricity demand to be met via the GB transmission system is also presented, along with alternative 'high' and 'low' scenario forecasts. Unlike the 'User' based forecasts, which include details of individual Grid Supply Point demands, the NGET forecasts are overall projections for Great Britain. These forecasts are included as supplementary information and reflect our views on possible outcomes based on specific assumptions, which are reported.

In general, the level and location of generation remains the major factor in determining the need for transmission system reinforcement. However, in some areas (e.g. importing areas) demand can exert the greater influence and as such there is an increasing need for accurate demand forecasts in terms of both level and location.

Additional explanatory information is also given, including an explanation of the sources of the customer demand data, how it is processed and the terminology used.

'User' Based Forecasts

ACS Peak GB Demand

This chapter focuses on the demand defined in the Glossary of Terms as "ACS Peak GB Demand" and discussed in Demand terminology. Accordingly, the "ACS Peak GB Demand" includes, amongst other things, distribution and transmission losses, station demand (i.e. station auxiliary demand supplied through the station transformers) and exports to External Systems.

Row 1 of Table 2.1 gives the ‘Unrestricted’ peak demand (as defined above) on the GB transmission system in ACS (average cold spell) conditions based on the projections made by the system ‘Users’. This demand increases from the provisionally estimated outturn of 61.4GW in 2007/08 to 67.3 GW by 2014/15, which represents a growth of 1.3% per annum. An explanation of the ACS correction procedure is given in the Supplementary Demand Information section of this chapter. The forecasts are in respect of the time of the simultaneous peak demand on the GB transmission system and accordingly take account of any diversity between the individual peak demands on each of the systems of the three Transmission Licensees (i.e. NGET, SPT and SHETL). As a point of interest, no pumping demand at pumped storage stations is assumed to occur at peak times.

Peak demands represent the highest demands on the GB transmission system to be met by Large Power Stations (directly connected or embedded), Medium and Small Power Stations which are directly connected to the GB Transmission System and by electricity imported directly into the GB transmission system from External Systems. They are therefore net of any allowance the User makes in his forecasts for the output of Medium Power Stations, Small Power Stations or Customer Generation embedded within distribution networks, and imports across embedded External Interconnections to these systems (i.e. Isle of Man). The allowances made by the Users for such embedded generation is discussed in Embedded and Renewable Generation; Tables 4.1 and 4.2 are of particular relevance.

As mentioned above, both the distribution and transmission system losses are included in the demand forecasts, as are exports across External Interconnections to External Systems. The distribution losses are included as part of the Users' submissions and estimated transmission losses are made at the time the forecast is formulated. Pragmatic assumptions, based on historical evidence and market intelligence, are made with respect to exports to External Systems. For instance, while the Moyle interconnector between Scotland and Northern Ireland is capable of a 500MW export, a 300MW export is assumed for the time of the GB peak demand.

Since the introduction of the British Electricity Trading and Transmission Arrangements (BETTA) in 2005, Seven year Statements have been extended to encompass the GB transmission system. In addition to widening demand forecasts to include Scotland, the ACS correction methodology was also updated. An explanation of the ACS correction procedure is given in the Supplementary Demand Information section of this chapter.

One particular change to the ACS methodology was made in order to address the significant fall-off experienced in the amounts of demand control being notified by suppliers under the Grid Code. This was making it increasingly difficult to derive realistic historical 'unrestricted' demands, i.e. actual metered ('restricted') demands plus notified demand control, on which to base the ACS correction. As a result, ACS demands are now calculated from historical 'restricted' rather than 'unrestricted' demands. (For the avoidance of doubt, 'restricted' demand is the level of demand after taking into account any demand control, i.e. it represents the actual metered outturn, whereas 'unrestricted' demand takes no account of the impact of any demand control).

Infrastructure planning for the transmission system continues to be based on ACS 'unrestricted' demands – a prudent approach to transmission planning made on the basis that demand control cannot be fully relied upon to be enacted at peak times. Historical 'unrestricted' ACS peak demands are now derived by analysing winter weekday evening peaks to estimate the total amount of customer demand control (both notified and un-notified) in force at such times. The resulting amounts, approximately 1GW, are similar to the levels of load management being notified during the 1990s. Adding the load management estimates onto the historical 'restricted' ACS peak outturns yields 'unrestricted' demands which form the basis of the ACS outturns and forecasts given in this Statement.

As a cautionary note, other related documents may refer to 'restricted' rather than 'unrestricted' demands, a case in point being National Grid's 'Winter Outlook Report'. Naturally, therefore, care should be exercised when making comparisons between demand forecasts on different bases.

As previously mentioned, station demands (i.e. power station demand supplied via the station transformers directly from the GB transmission system) are included in the main forecast ACS peak GB demand presented in row 1 of Table 2.1.

However, Table 2.1 also presents (in rows 3 and 5) the 'User' demand forecasts excluding power station demand. This recognises that Transmission Entry Capacity (TEC), which is a key term used to describe power station output, is used extensively in other analyses presented elsewhere in this Statement (e.g. power system analyses and plant margin evaluation). By definition, TEC is net of station demand and accordingly ACS Peak GB Demand excluding station demand should be used where relevant to avoid it being double-counted.

In addition, row 5 of Table 2.1 presents the 'User' demand forecasts excluding exports across the Moyle interconnector between Scotland and Northern Ireland as well as excluding power station demand. This forecast is compatible with the generation ranking order of Table 7.1 , which treats exports to Northern Ireland as negative generation. Table 7.1 is presented in GB Transmission System Performance.

Figure 2.1 shows recent ACS peak outturns and the current 'User' forecasts of ACS peak demand on the GB transmission system given in row 1 of Table 2.1.

Figure 2.1

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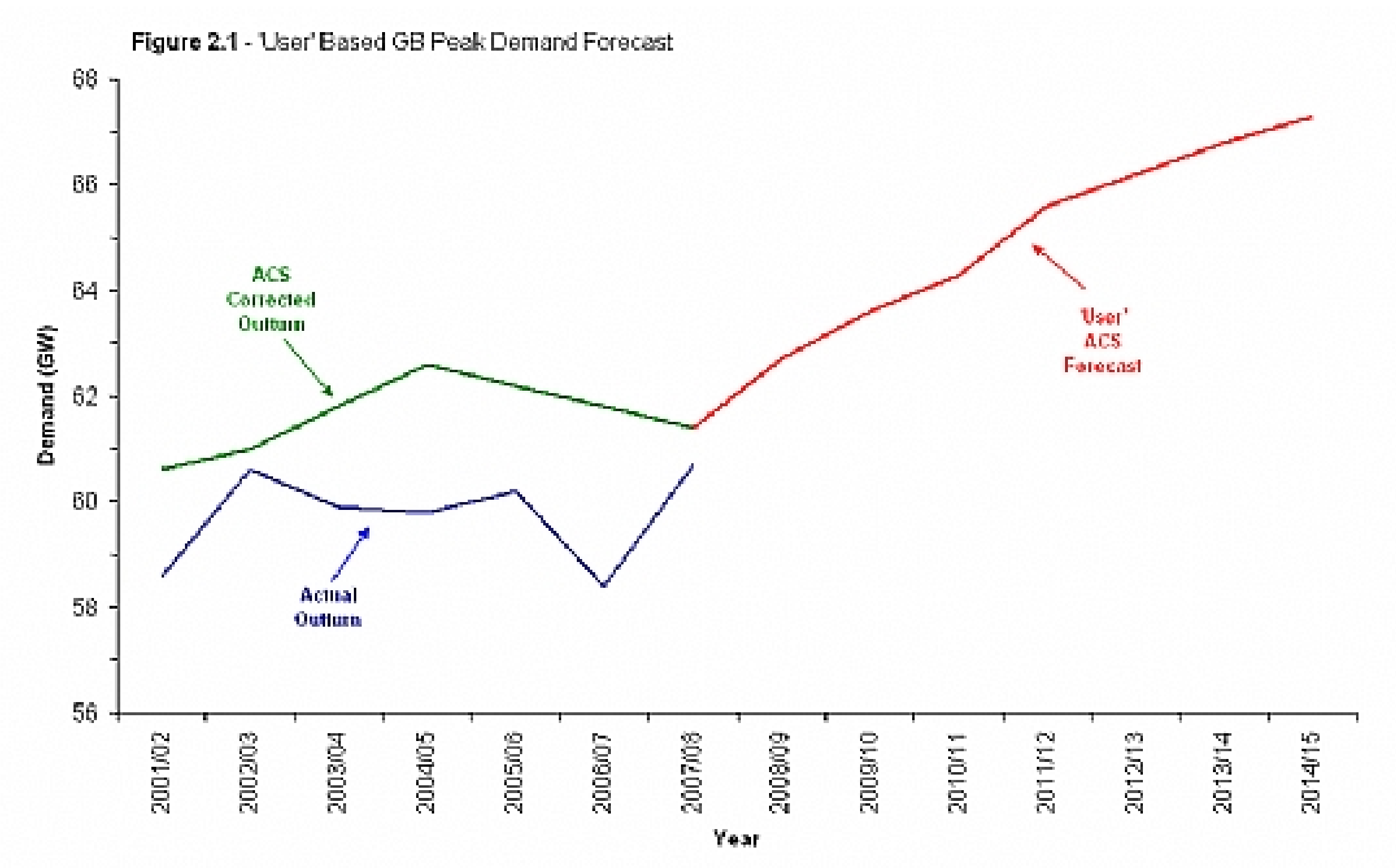

It is explained under the Customer Demand Data section that, while the local peak demand is used for Grid Supply Point planning, the demand at the time of the GB system peak is used for infrastructure planning purposes. That section also explains that transmission losses are added to the Users' demand submissions, after which they are adjusted such that the aggregate of 'User' demand projections for the base year (2007/08) is scaled to the provisional or, if known, final ACS corrected outturn for the winter. The resulting adjustment factor is applied to subsequent years, thus retaining customers' forecast aggregate annual growth rates. These forecasts are amended when necessary in SYS Quarterly Updates to align with final base year ACS outturns.

Demand on the Grid Supply Points (GSPs)

Grid Supply Points (GSPs) are the points of connection between the GB transmission system and the distribution networks and/or Large Power Stations. The times of individual GSP peak demands can vary from GSP to GSP and as such may not coincide with the time (or date) of the GB system peak. In Appendix E, tables E.1.1 to E.1.7 list the 'User' based forecasts of maximum demand for each GSP, firstly in respect of the time of the GSP peak and secondly in respect of the projected time of the GB system peak. These demands are measured at the GSP and accordingly include distribution losses but, unlike the demands given in Table 2.1, they naturally do not include transmission losses.

The final column in Table E.1.1 of the above series gives DCLF Node information. This has been included to enable Users to identify the HV Direct Current Load Flow (DCLF) transport model node at which LV demand is mapped for the purpose of calculating Transmission Network Use of System (TNUoS) tariffs (please refer to Use of System Tariff Zones) and producing the Condition 5 information paper which forecasts the future path of the locational element of the TNUoS tariffs. The additional column is included for information purposes, but it should be noted that the GB Peak figures included in the table will not necessarily exactly match those demand figures contained in the DCLF transport model as adjustments to the data are made to allow for station demand and generation is treated as negative demand. Also in Appendix E, the series of tables E.2.1 to E.2.7 provide GSP information at the projected time of the minimum GB system demand.

For grid supply point planning, demand at each GSP's peak is used, together with appropriate allowances for embedded Large Power Stations, in accordance with the Licence Standard. An allowance for generation by Medium and Small Power Stations and imports across embedded External Interconnections is already made in the customers' demand projections. For completeness, Tables E.1 and E.2 also list Large Power Stations connected to GSPs or embedded in the distribution networks behind GSPs, together with demand power factors.

Recent Growth in Peak Demand

Figure 2.1 shows recent GB actual and ACS peak demands along with the latest 'User' based projections of ACS peak demand on the GB transmission system. Correcting historical peak demands to ACS conditions enables underlying peak demand patterns and trends to be more readily observed.

Many factors can influence the level of peak demand met by the transmission system. These include the weather; economic activity; energy prices; energy efficiency/conservation; customer demand management; competition from other fuels; take up of self-generation; supplies taken from generation embedded within distribution networks and the level of interconnector exports.

For many of the above factors, the effects are generally small over time and have little impact on year to year changes in transmission system demand. However, some factors, particularly, the weather, can cause wide variations in demand from one year to the next, especially for peak demand.

Actual GB peak demand in the winter of 2007/08 at 60.6GW was over 2,000MW higher than in the previous winter and equalled the previous highest GB peak which had occurred 5 years earlier. A major factor in the significant peak demand growth seen between 2006/07 and 2007/08 was the mild weather in the previous winter. The ACS correction procedure, which is outlined in Supplementary Demand Information, eliminates the weather effects and gives a better indication of the underlying pattern of annual peak demand (see Table 2.4 and Figure 2.1).

Correcting winter weekday peak demands in 2007/08 to ACS conditions yields a provisional ‘unrestricted’ peak of 61.4GW, a decline of 400MW on the previous winter’s ACS peak. Half the drop arose from a 200MW reduction in interconnector exports at peak to Northern Ireland. In addition, gas prices have risen sharply in recent years and the pre-dominance of this fuel for electricity generation has resulted in significant increases in electricity prices which have been a major contributory factor behind falls in ACS peak demand seen in the last three winters.

The definition of demand used throughout this Statement is explained and discussed in the section on Demand Terminology and includes exports to External Systems. Before the commencement of the New Electricity Trading Arrangements (NETA) in March 2001, little power was exported across the External Interconnector with France. However, under NETA and its successor the British Electricity Trading and Transmission Arrangements (BETTA), the cross-channel link has operated more on a two-way basis, although exports to France do not tend to occur at GB system peak times and imports have still predominated at other times. In addition, since it became operational in 2002, the 500MW Moyle interconnector link between Scotland and Northern Ireland has been used almost solely to export power to the province, and a similar pattern is likely when the planned interconnector between North Wales and the Irish Republic becomes operational in 2011/12.

Demand Profiles

Figure 2.2 presents daily demand profiles for the days of maximum and minimum demand on the GB transmission system in 2007/08 and for days of typical winter and summer weekday demand. Please note that these demands are shown exclusive of station transformer, pumping demand and interconnector exports.

Figure 2.2

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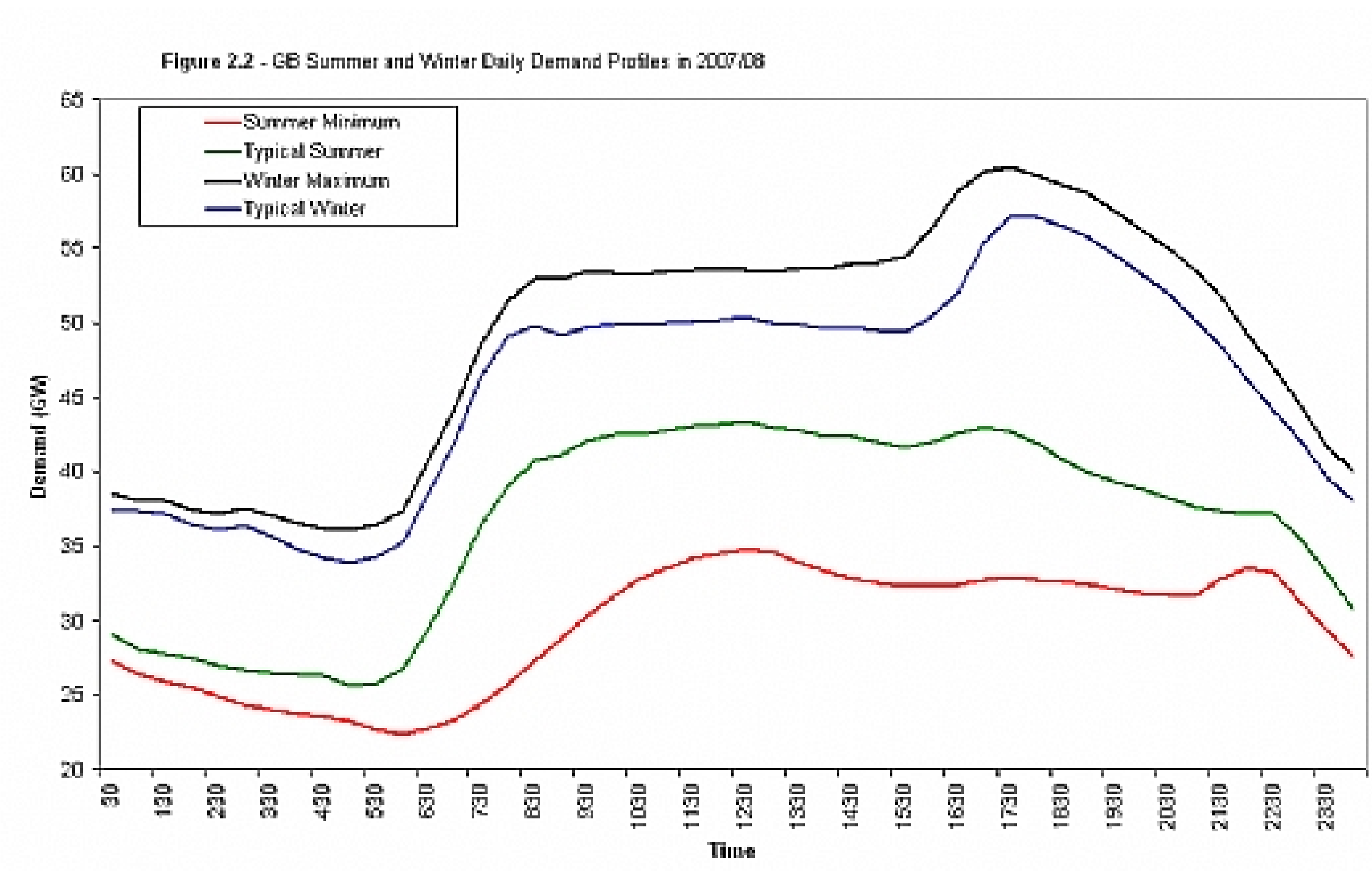

Key points of interest are: -

(i) Maximum & Typical Winter Profiles (Weekday)

00:00h - 03:00h: Operation of time-switched and radio tele-switched storage heating &water heating equipment.
06:30h - 09:00h: Build-up to start of working day.
09:00h - 16:00h: Plateau reflecting the working day (primarily commercial &industrial demand).
16:30h - 17:30h: Rise to peak due to lighting load and increased domestic demand outweighing fall-off in commercial and industrial demand.

(ii) Typical Summer Profile (Weekday)

As (i) above without effects of storage heating demand and with the later onset of evening lighting load.

(iii) Minimum Summer Profile (Sunday)

As (ii) above with increased lunchtime cooking demand.

Whilst Figure 2.2 shows how demand varies through the day in summer and winter, Figure 2.3 plots weekly maximum and minimum demands in 2007/08 to indicate how demand varies over the year. As with Figure 2.2 , the demands shown in Figure 2.3 are exclusive of station and pumping demand and interconnector exports.

Figure 2.3

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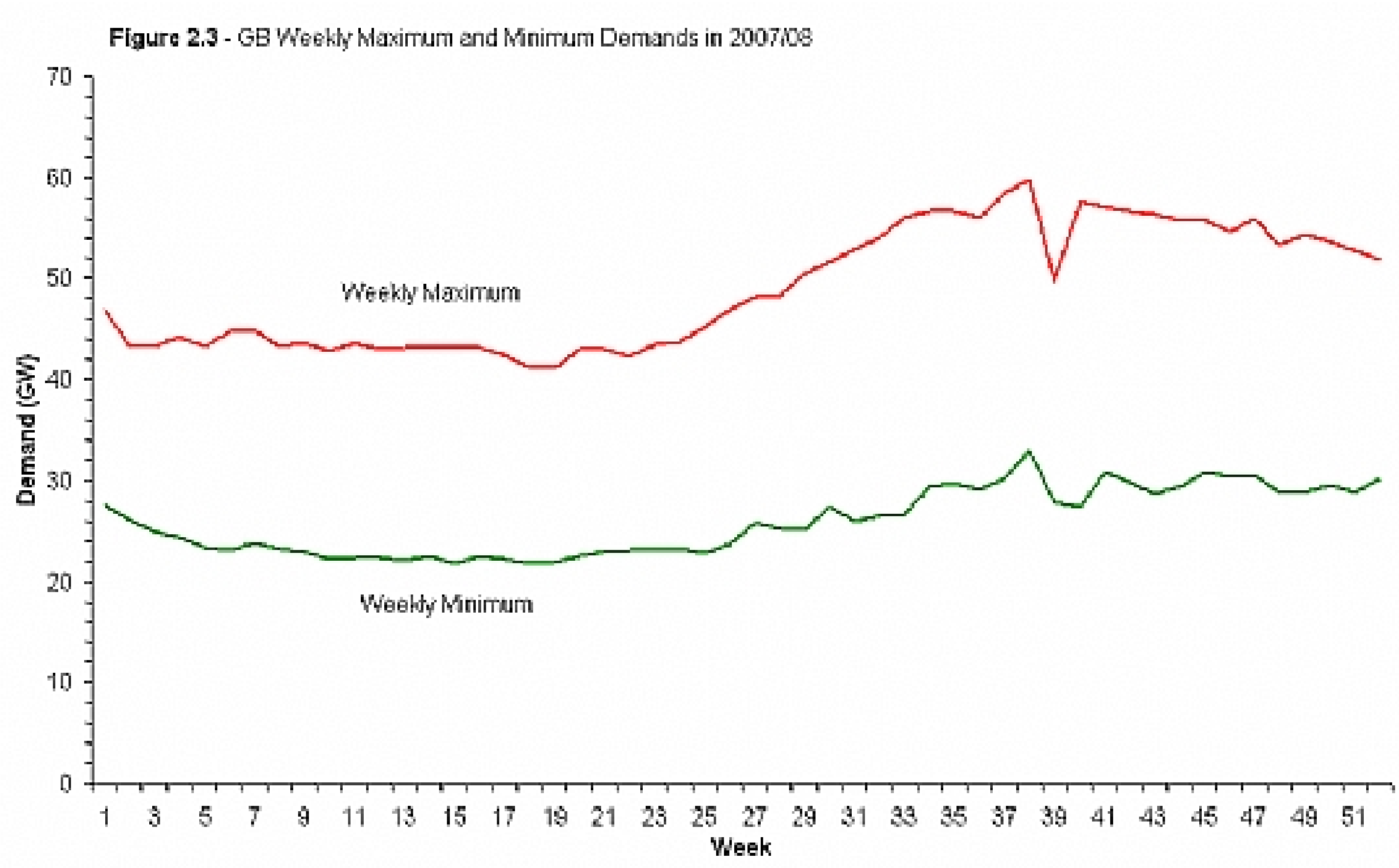

Figure 2.3 - GB Weekly Maximum and Minimum Demands in 2007/08

Figure 2.4 shows the GB annual load duration curve for 2007/08. Based on demand data for every half hour of the year, it shows the percentage of time in the year against the proportion of the year's peak. For example, demand exceeded 50% of the annual peak for more than 83% of the time.

Figure 2.4

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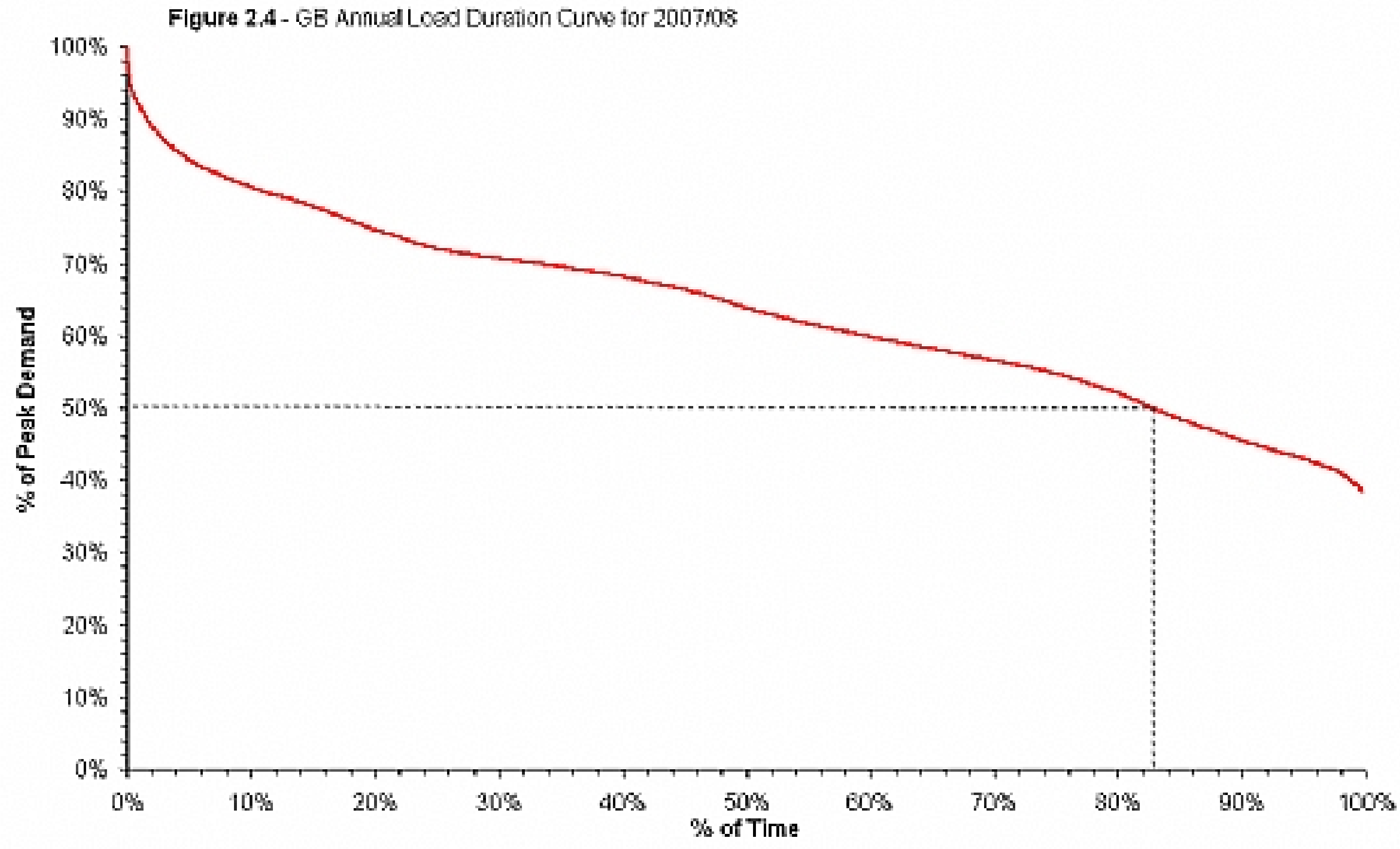


National Grid Forecasts

Background

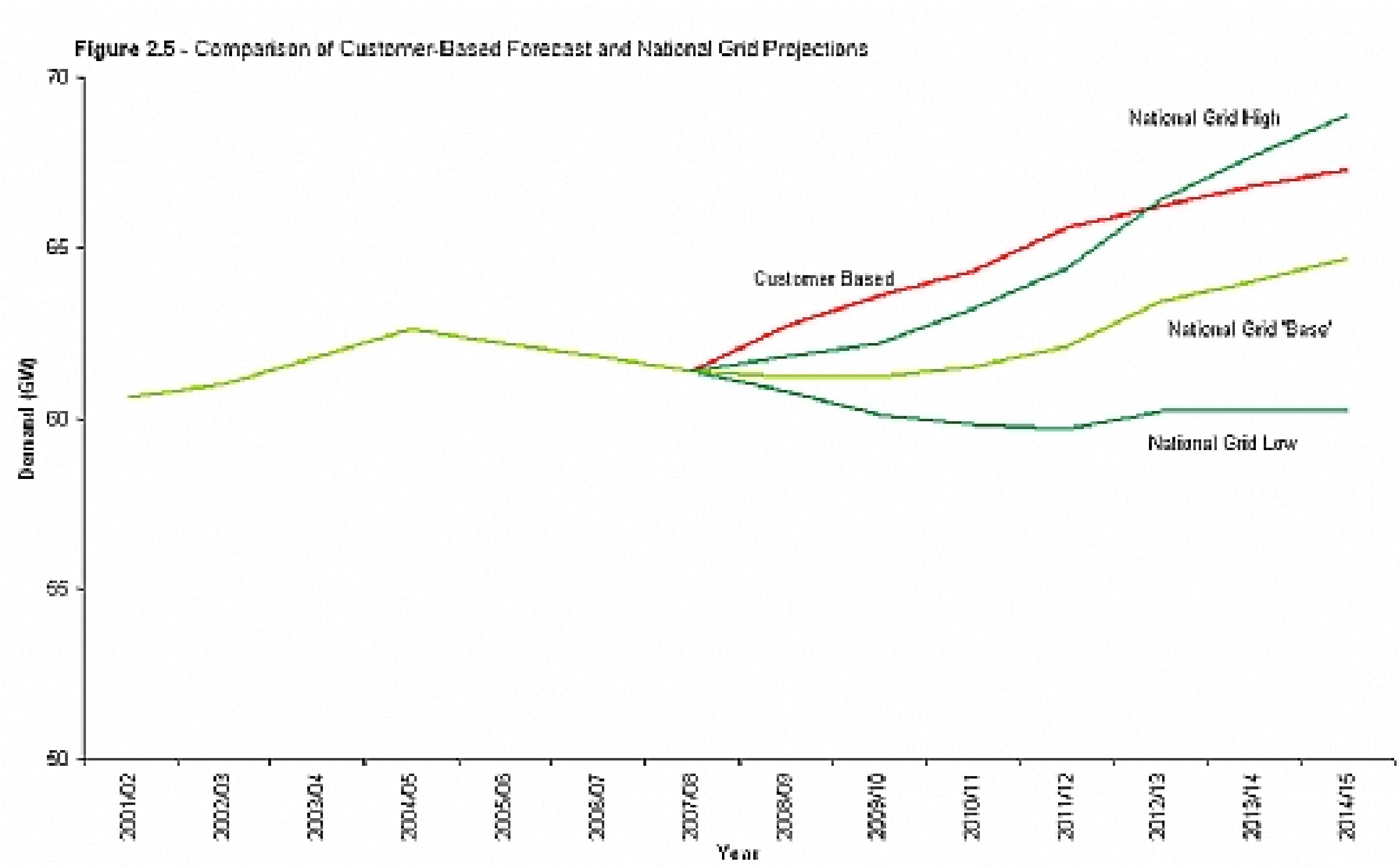
'User' based peak demand forecasts presented in this Statement are obtained from the aggregation of 'User' submissions (see Table 2.1) and these forecasts form part of the SYS background upon which most of the studies presented in this Statement are based. However, for comparison, NGET has provided its own 'base', 'high' and 'low' demand scenarios.

For the 'high' and 'low' demand scenarios, combinations of favourable and adverse developments are assumed which yield high and low transmission system demands. For example, in the low scenario better progress towards the government's 2010 targets for combined heat and power and renewables is assumed, resulting in stronger growth in embedded generation. In contrast, in the high demand scenario circumstances bring a much slower take-up of such schemes and hence embedded generation. These assumptions, along with variations for other factors such as economic growth, result in a fairly wide range of outcomes for transmission system demand.

When compared with NGET's 'base' projections, the 'User' based forecasts show stronger growth; particularly over the next couple of years (illustrated in Figure 2.5). In submitting their forecasts, 'Users' are not required to provide information on their background assumptions but possible reasons for the transmission system demand differences include alternative views on factors such as economic prospects and the growth of demand met by embedded generation.

Figure 2.5

Click to load a larger version of Figure2.5 image



Details of NGET's peak demand and electricity requirements projections and the main economic assumptions underlying them are given in Table 2.3 and Table 2.4. (Please note that the central economic forecasts on which they are based have been provided by Experian Business Strategies).

National Grid 'Base' Forecast

Although at 3.1%, GDP growth in 2007 hit a 3-year high, a significant slowdown is anticipated over the next two years, with projected growth at halving from the 2007 rate. Household spending underpinned the expansion in 2007 but relatively tight monetary conditions and the impact of the “credit crunch” on lending, the housing market and consumer confidence cause household spending to slacken significantly. The immediate outlook for investment is also weak and export demand will be sluggish against the background of global economic uncertainty and a possible US recession.

Recovery from the downturn will be slow, taking until 2011 to return to the historical trend rate of at 2½ to 2¾% per annum. Within this, however, consumer spending will grow a little more slowly because of the impact of ongoing factors such as heavy indebtedness and low savings.

Against the economic background outlined above, total GB annual electricity demand is projected to increase by 1.1% per annum over the period 2007/08 to 2014/15. This growth relates to both power supplied from the transmission system and that met from generation embedded within distribution systems. However, growth of the latter is expected to constrain demand growth seen on the transmission system.

As part of its Climate Change strategy for achieving environmental emissions targets, the government set objectives for combined heat and power (CHP) and renewable generation. For CHP, the target was for at least 10GW of electrical CHP capacity by 2010. However, the commencement of the new electricity trading arrangements (NETA) in 2001 had an adverse impact on CHP's fortunes, with the balancing mechanism making it difficult for surplus output from CHP plant to compete in the new market place. As a result many potential developers either abandoned or postponed planned CHP schemes. Over the period of this forecast a modest recovery from the near moratorium of recent years is assumed for CHP, with electrical capacity reaching 8GW in 2010/11, mainly as a result of two large CHP power stations, Immingham (Stage 2) and Isle of Grain, directly connecting to the transmission network in that year.

The 2010 goal set for renewables was for 10.4% of electricity consumption to be sourced from such generation. To assist with achieving this the Renewables Obligation (RO) requires increasing proportions of electricity sold each year by licensed suppliers to be sourced from qualifying renewable fuels. In 2006 generation from such fuels accounted for 4.4% of electricity sales, up from 4.0% in the previous year, but below the 6.7% level set for 2006/07.

As with CHP, the operation of some renewable generation was adversely affected by NETA. However, the NGET ‘base’ forecast assumes that the ongoing obligation on suppliers to source increasing amounts of electricity from renewable sources will see continued growth in such generation, particularly wind, with the current forecast yielding 7½% of consumption being met from qualifying renewables in 2010/11.

Of the new CHP and renewable generating capacity, that which is embedded within distribution networks, if utilised, reduces the growth in peak demand seen on the transmission system. In the 'base' forecast this demand is projected to rise by 0.7% per annum, compared with 1.1% per annum projected for overall electricity use.

Since it became operational, the 500MW External Interconnector between Scotland and Northern Ireland has been used almost solely to export power to the province. The ‘base’ forecast assumes exports of 300MW across it at peak times, with up to 1TWh projected annually. In addition the “East/West” interconnection between Wales and the Irish Republic is expected to be exporting 450MW at peak and up to 2TWh per annum from 2012/13.

With regard to the External Interconnector between England and France, no exports are projected for GB system peak times and over the duration of this forecast, the interconnector is assumed to continue to be primarily utilised to import power from France, with up to 1.7TWh per annum projected for exports.

In summary, the ‘base’ forecast shows annual electricity requirements on the GB Transmission System rising from 351TWh in 2007/08 to 366TWh in 2014/15 i.e. average growth of 0.6% per annum. ACS ‘unrestricted’ peak demand increases by 0.7% per annum, from 61.4GW in 2007/08 to 64.7GW in 2014/15.

Throughout the period covered by this year’s forecast, the User based forecast is more optimistic than National Grid’s ‘Base’ forecast and is higher for the first few years than National Grid’s High growth scenario projections. In the past, the User based forecasts have tended to underestimate the likely impact of embedded generation on system demand, which results in higher demand forecasts. In addition, it would appear that the User based forecasts do not make allowance for either the current high prices or the forward price curve, which again leads to the User forecasts being higher than those of National Grid, which do make such an allowance. Furthermore, the User based forecasts were submitted last June based on demand seen in 2006/07. The National Grid forecasts benefit from being based on demand seen in 2007/08, when peak demand fell for a third successive year against the background of ongoing high energy prices and a signs of a faltering economic outlook.

National Grid High Growth Scenario

This upside scenario is based on more optimistic assumptions about factors affecting transmission system electricity demand growth over the medium term. A main driver is faster economic growth, with GDP averaging 2.7% per annum (see Table 2.4). This results in greater use of energy, with annual electricity demand overall rising by 1.4% per annum. With slow rates of take-up assumed for both CHP and renewable generation embedded within distribution networks, annual requirements met via the GB transmission system, grow at a similar rate, rising from 351TWh in 2007/08 to 386TWh in 2014/15. ACS peak demand increases from 61.4GW to 68.9GW over the same period, growth of 1.6% per annum.

National Grid Low Growth Scenario

In this downside scenario, economic growth is slower (see Table 2.4), with GDP expanding by 2.1% per annum to 2014/15. A particularly high profile is assumed for environmental issues, with energy efficiency schemes for domestic and business customers heavily promoted, bringing good progress towards the environmental targets set for 2010 for CHP and renewable generation. Overall annual demand for electricity rises by 0.8% per annum. However, the effects of significant embedded CHP and renewables growth result in falling demand on the transmission system, with annual requirements declining by 0.3% per annum from 351TWh in 2007/08 to 343TWh in 2014/15. ACS peak demand similarly declines by 0.3% per annum, from 61.4GW to 60.2GW over the same period.

Supplementary Demand Information

Self-Generation

Customers who load manage in response to high electricity prices and/or triad demand charges can either reduce their production or, if available, fall back on their own generation in order to maintain output. In these circumstances the form of self-generation used would normally be of a standby nature since other main forms of own generation such as combined heat and power (CHP) would be likely to be already in operation.

As part of its Climate Change Programme to reduce carbon dioxide emissions in 2010 by 20% of their 1990 level, a target of 10GW of electrical CHP capacity was set for 2010 (see Embedded and Renewable Generation). Increases in the capacity, and hence use, of CHP and other forms of self-generation, particularly that which is not of a standby type, would be expected to result in commensurate falls in the level of demand met from the transmission system, although this does not necessarily mean a reduction in the system's use. (For example, the location of new self-generation in some areas could result in increased system power flows as a consequence of the displacement of local demand previously met by local generation, leading to the surplus local generation being transported elsewhere by the GB transmission system).

Customer Demand Data

Every 'User' who takes, or expects to take, demand directly from the transmission system via a Grid Supply Point (GSP) is required by the GB Grid Code to provide NGET with demand forecasts with respect to that GSP. These forecasts are required to be submitted by Week 24 (i.e. mid-June) of each year, although updates can be provided after this date.

'Users' who take demand directly from the transmission system are, in the main, the distribution network operators. In addition some industrial sites are directly connected to the transmission system and most Large Power Stations' own demand is also met from it via their station transformers. The Week 24 forecasts are used for, amongst other things, studying power flows on the transmission system. Accordingly the Week 24 submissions, which are given in respect of each of the seven succeeding financial years, include:

(i) the demand the network operator expects to take from each GSP at the time of the expected system demand peak (the date and time being advised in advance by NGET) - primarily for use in infrastructure planning; and

(ii) the maximum demand the network operator expects to take from each GSP at any time - primarily for use in GSP planning.

In both cases (i) and (ii) above, network operators are required to make allowance for demand met by Medium and Small Power Stations embedded within their networks and for imports across embedded External Interconnections.

When planning the development of the transmission system, account is taken of all Large Power Stations, whether embedded in a distribution network or directly connected to the transmission system.

For power flow studies and other system analyses, total transmission system demand is derived from the Week 24 submissions as follows. Peak demand forecasts at the time of system peak provided by each customer are aggregated and projected transmission losses are added. A correction factor is then applied to the resultant total demand stream which scales the total for the initial year to the provisional (or final, if known) ACS corrected peak demand outturn. Subsequent years are then scaled by the same factor, thus retaining customers' projected annual growth rates. This scaling process was originally formulated with the approval of distribution network operators.

For Grid Supply Point (GSP) planning, demand at each individual GSP's peak is used, together with appropriate allowances for embedded Large Power Stations, in accordance with the Licence Standard. For planning the development of the infrastructure of the main interconnected transmission system, as opposed to specific GSPs, the unrestricted ACS Peak GB Demand forecast is used. Using unrestricted demand for infrastructure planning recognises that demand control cannot be relied upon in the planning time phase. Nevertheless, in the event of a sufficiently high level of certainty being attached to the implementation of demand control we would take demand management into account within our infrastructure planning.

Average Cold Spell (ACS) Correction

Actual outturn peak demands can vary considerably from one year to another depending on the weather and other factors such as economic activity and consumer behaviour. ACS demand correction enables more meaningful comparisons to be made between outturn demands and allows forecasts to be made on a weather base that also conforms to security standard planning requirements.

National peak demand forecasts given in this Statement are based on average cold spell (ACS) weather conditions. These are the combination of weather elements (i.e. temperature, illumination and wind) that give rise to a level of peak demand within a financial year that has a 50% chance of being exceeded as a result of weather variations alone.

Prior to the introduction of the British Electricity Trading and Transmission Arrangements (BETTA) in 2005, ACS outturn peak demands (and forecasts) were based on 'unrestricted' demands. These were derived by adding the load management enacted at peak and notified by suppliers under the Grid Code onto winter weekday outturn peak demands. With BETTA covering the whole GB transmission system, in addition to extending the demand forecasts to incorporate Scotland, the ACS correction methodology was also updated.

One particular change to the methodology was made in order to address the significant fall-off experienced in the amounts of demand control being notified under the Grid Code. The latter made it increasingly difficult to derive realistic historical 'unrestricted' demands, i.e. actual metered ('restricted') demands plus notified demand control, on which to base the ACS correction, which is now calculated from historical 'restricted' instead of 'unrestricted' demands. (For the avoidance of doubt, 'restricted' demand is the level of demand after taking into account demand control, i.e. it represents the actual metered outturn, whereas 'unrestricted' demand makes no allowance for the impact of any demand control).

Although the ACS correction procedure now produces historical 'restricted' demands, infrastructure planning for the transmission system continues to be based on ACS 'unrestricted' demands. This prudent approach is made on the basis that load management cannot be fully relied upon to be enacted at peak times. ACS 'unrestricted' demands are therefore still required and these are obtained by adding estimates of load management obtained from analysis of winter weekday evening peak demands onto the ACS 'restricted' peak demands. The resulting ACS 'unrestricted' demands outturns provide the platform for producing 'unrestricted' demand forecasts.

As a cautionary note, other related documents may publish 'restricted' rather than 'unrestricted' demands, a case in point being National Grid's 'Winter Outlook Report'. Care should therefore be exercised when making comparisons between demand forecasts on different bases.

The specific methodology for identifying ACS demand comprises two main parts. Firstly, a mathematical model estimates demand/weather coefficients from historical 'metered' demands (i.e. actual outturn peak demands). The modelling uses recent winters' demands rather than a longer historical period to ensure that the latest demand behaviour is captured as well as to include as much weather variation in the modelling data as possible. Weather and demand data over the GMT period (i.e. late-October to late-March) for weekday peak half hours is modelled to give:

Winter Weekday Darkness Peak Demand is equal to the sum of :-

- A Constant;
- Weather Dependant Demand;
- Demand Management;
- Seasonal Trends (Day, Week, Year); and
- Error Terms.

The weather dependent demand at the darkness peak is a function of :-

- Effective Temperature at 17:00 GMT;
- Effective Temperature squared at 17:00 GMT;
- Effective Illumination at 17:00 GMT; and
- Cooling Power at 17:00 GMT.

The effective temperature (TE) is an average of the current and previous day's temperature at the time of the winter darkness peak. Cooling power (CP) is an empirical combination of temperature and wind speed, similar to wind chill. Effective illumination (EI) is a function of solar radiation, taking in to account the number and type of cloud layers, visibility and the amount and type of precipitation (although at the time of the darkness peak in mid-winter EI is zero).

In the second part of the ACS correction methodology, the coefficients are used to carry out a simulation analysis of Winter Weekday Darkness Peak Demand (WWDPD) for the last winter. Simulations of the Weather Dependant Demand & Day of the week are fed into the WWDPD model for each Electricity Supply Industry (ESI) week (where weather dependent demand is described above and estimated from TE, EI & CP actuals which are aggregated from regional weather stations collected for the last thirty years).

The peak of the simulated Winter Weekday Darkness Peak Demands for each of 10,000 winter simulations are ordered and the median demand (50^{th} percentile) is identified as the ACS demand (i.e. the level of peak demand that has a 50% chance of being exceeded as a result of weather variation).

Demand Terminology

Demand Definitions

The definition of the term 'ACS Peak GB Demand' given in the Glossary of Terms has been written for the purpose of this Statement. The meaning of the term may differ in some respects in other documentation. Figure 2.6 provides a generalised illustration of the definition and also aids comparison with other demand terms in current usage.

Figure 2.6

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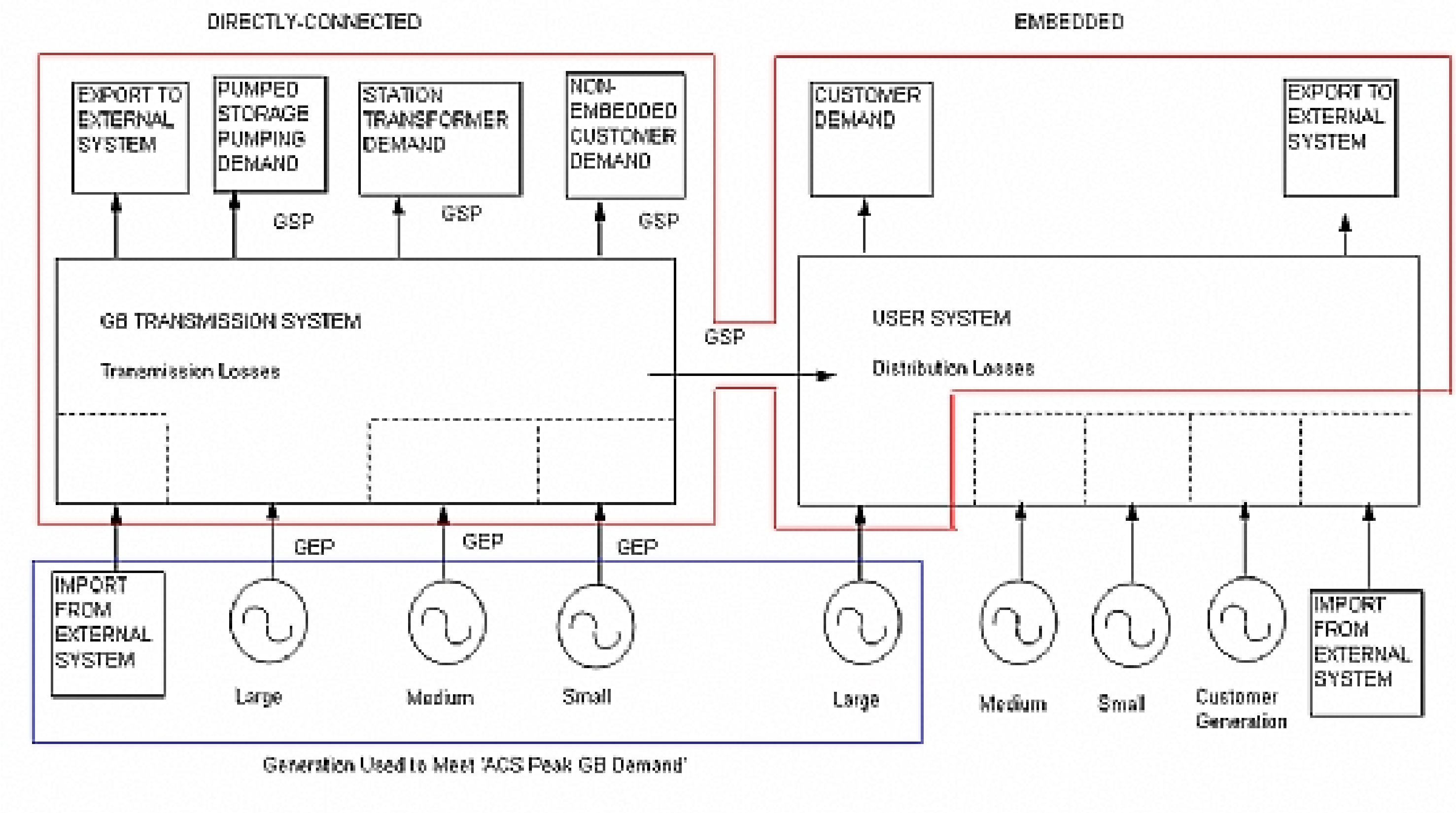
Figure 2.6 - ACS Peak GB Demand



The figure shows the different categories of demand directly connected to the transmission system together with the demands supplied from the distribution networks, which are in turn directly connected to the GB transmission system at Grid Supply Points (GSPs). Transmission and distribution losses are also included.

In Figure 2.6, the area within the red border encapsulates those components of demand making up ACS Peak GB Demand, with the generation used to meet ACS Peak GB Demand bordered in blue. This generation comprises; directly connected power stations, whether Large, Medium or Small; embedded Large Power Stations; and imports from External Systems across directly connected Interconnections. Until the winter of 2001/02, exports to France across the Interconnection were exceptional. Since then exports have become more common, although not at times of system peak. All these sources of generation are the subject of Generation.

In providing demand forecasts for their Grid Supply Points, the distribution network operators net off their own allowances for the output of embedded Medium and Small Power Stations, Customer Generation and also for the imports across embedded External Interconnections. Customer Generating Plant operates to supply all or part of its own electricity requirements and exports any surplus onto the local distribution network. Embedded generation is the subject of Embedded and Renewable Generation.

The SYS definition of ACS Peak GB Demand is in line with the GB Grid Code definition of "GB Transmission System Demand". Please note that in both cases (i.e. the above definition and the GB GC definition) the demand includes exports to external systems, pumped storage pumping demand and station transformer demand. This is unlike the GB GC definition of "GB National Demand", which specifically excludes those three demand categories.

For the duration of this forecast it is assumed that there will be no exports to France at the time of the GB system peak, nor is there likely to be any demand at peak associated with pumped storage. Exports at peak are expected from the SPT system to Northern Ireland via the Moyle interconnector and across the planned 500MW interconnector between North Wales and the Irish Republic, and these exports form part of the "ACS Peak GB Demand". (As a point of interest, the converse also applies, i.e. expected imports from External Systems at times of system peak contribute to supplying demand and are therefore treated as generation).

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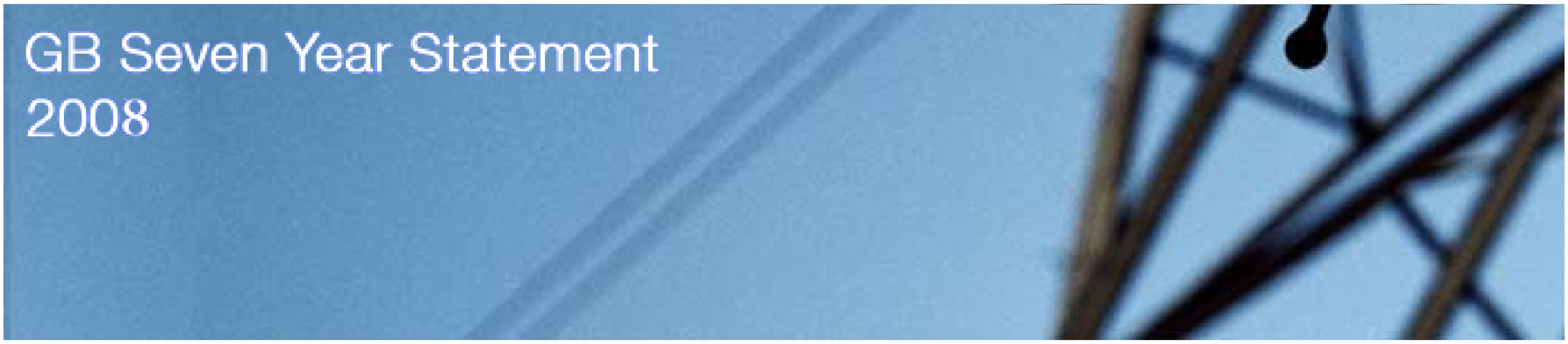

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Table 2.1 - ACS Peak Demand Forecasts (GW)

Forecast	Description	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015
1	ACS Peak incl Station Demand, Exports to N Ireland via Moyle Interconnector and Exports to Republic of Ireland via "East/West" Interconnector	61.4	62.7	63.6	64.3	65.6	66.2	66.8	67.3
2	Station Demand	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
3	ACS Peak excl Station Demand and incl Exports to N Ireland via Moyle Interconnector and Republic of Ireland via "East/West" Interconnector (for plant margin evaluation)	60.8	62.1	63	63.7	65	65.6	66.2	66.7
4	N Ireland Export Demand via Moyle Interconnector	0.1	0.3	0.3	0.3	0.3	0.3	0.3	0.3

5	Republic of Ireland Export Demand via "East/West" Interconnector	0	0	0	0	0.5	0.5	0.5	0.5
6	ACS Peak excl Station Demand and Exports to N Ireland and Republic of Ireland (for ranking order & SQSS studies, where exports to N Ireland and Republic of Ireland are treated as negative generation)	60.7	61.8	62.7	63.4	64.2	64.8	65.4	65.9

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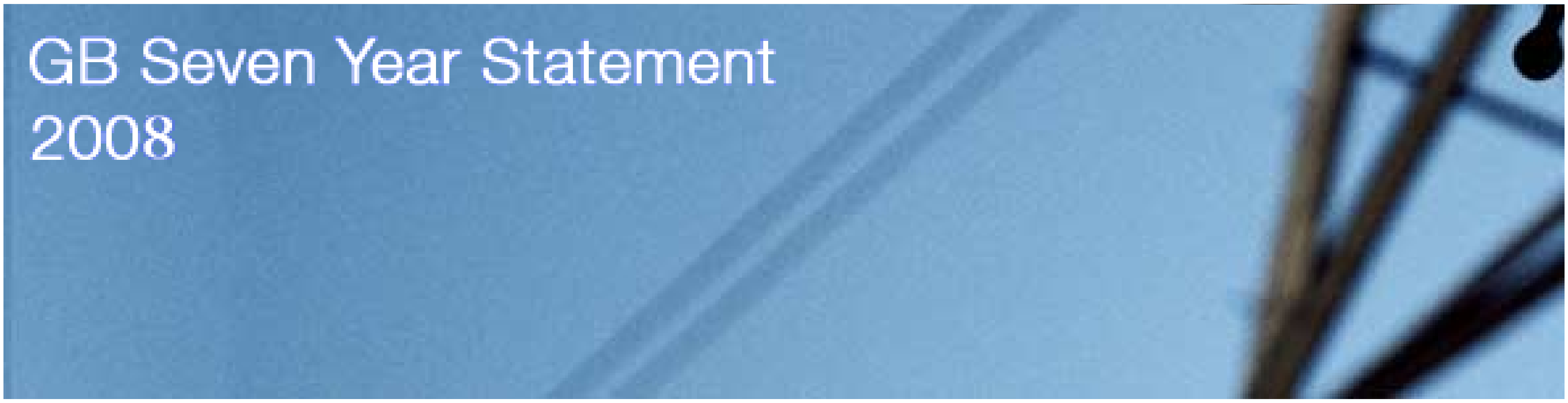

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Table 2.2 - Peak Demands and Annual Electricity Requirements: Historical Outturns

Year	Actual Peak Demand (GW)	ACS Corrected Peak Demand (GW)	Actual Electricity Requirements (TWh)	Weather Adjusted Electricity Requirements (TWh)
2001/02	58.6	60.6	339.8	342
2002/03	60.6	61	345.1	347.6
2003/04	59.9	61.8	354.8	355.3
2004/05	59.8	62.6	354.4	356.4
2005/06	60.2	62.2	355.8	354.4
2006/07	58.4	61.8	347.3	350.5
2007/08	60.7	61.4	348.4	351

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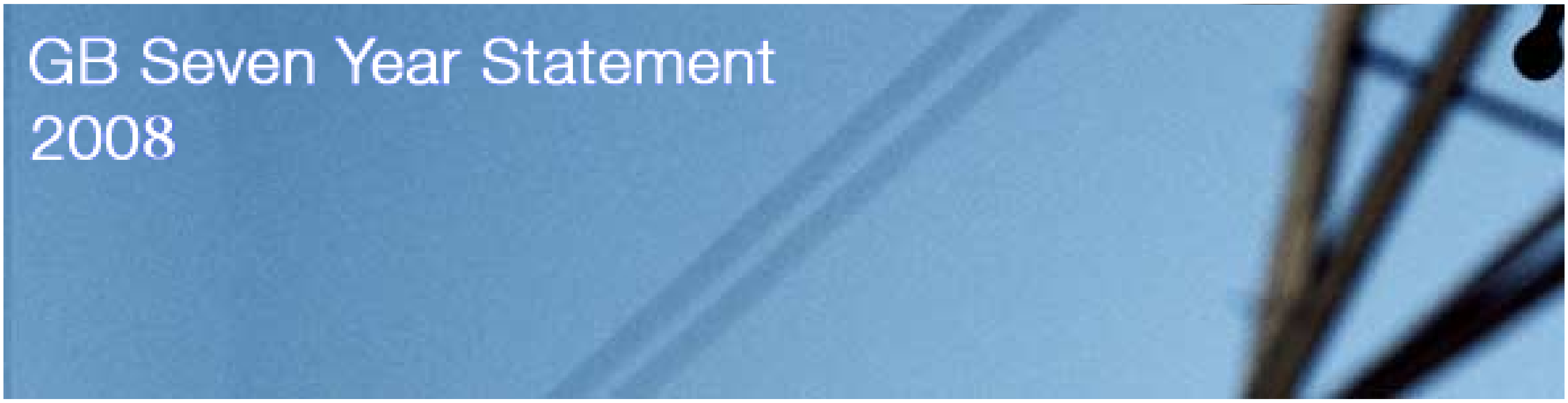

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Table 2.3 - National Grid Base Forecast with High and Low Growth Demand Scenarios

Year	ACS Peak Demand (GW) Low Scenario	ACS Peak Demand (GW) Base Scenario	ACS Peak Demand (GW) High Scenario	Annual Electricity Requirements (TWh) Low Scenario	Annual Electricity Requirements (TWh) Base Scenario	Annual Electricity Requirements (TWh) High Scenario
2007/08 Prov	61.4	61.4	61.4	351	351	351
2008/09	60.8	61.2	61.8	344.9	348.2	351.7
2009/10	60.1	61.2	62.2	340.8	346.7	352.8
2010/11	59.8	61.5	63.2	339.1	348	357.1
2011/12	59.7	62.1	64.4	339.1	351.3	363
2012/13	60.2	63.4	66.4	340.3	356.2	370.8
2013/14	60.2	64	67.7	340.7	359.9	377.5
2014/15	60.2	64.7	68.9	341	363.8	383.8

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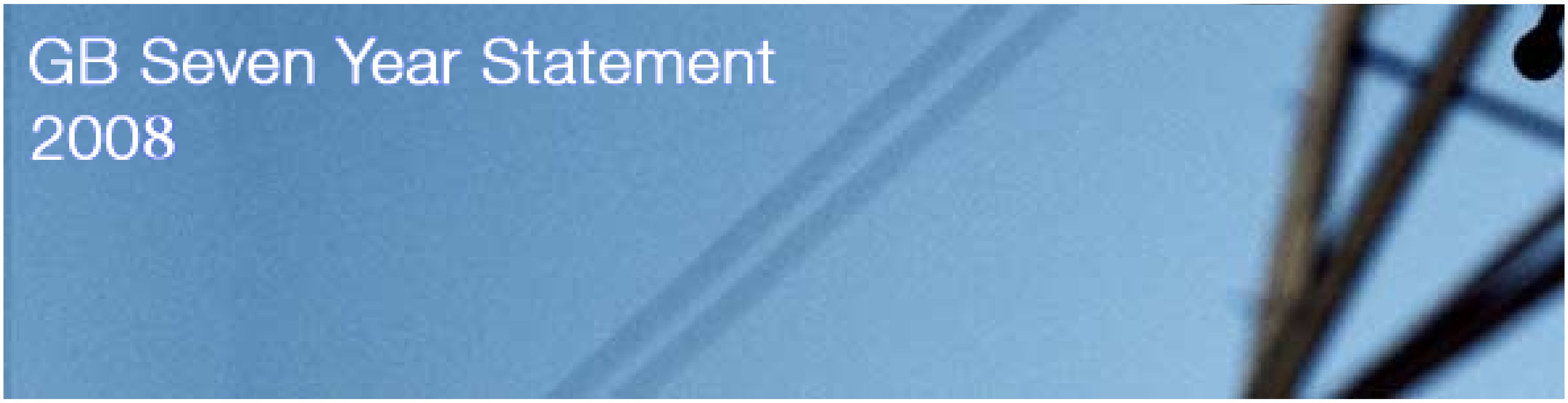

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Table 2.4 - National Grid Base, High and Low Economic Growth Scenarios

Forecasts (% per Annum)	GDP	Household Expenditure	Manufacturing Output	Service Sector Output
NGC 'Base' Forecast 2006/07 - 2013/14	2.4	2.1	1.3	2.6
Low Growth Scenario 2006/07 - 2013/14	2.1	1.8	0.8	2.3
High Growth Scenario 2006/07 - 2013/14	2.7	2.4	1.8	2.9

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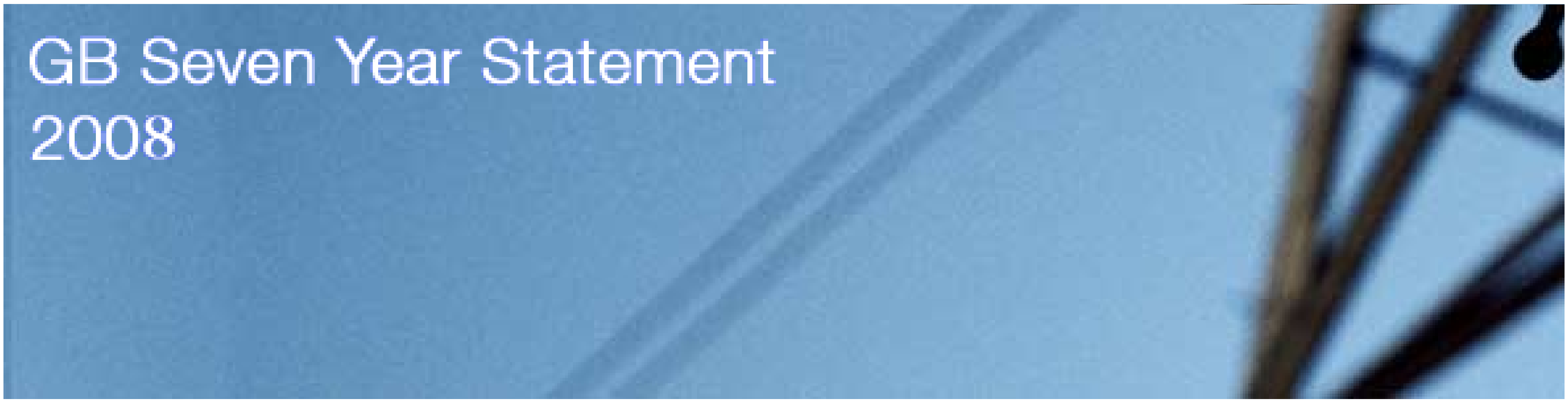

Introduction to Chapter 3

This chapter presents information on all sources of generation, which are used to meet the ACS Peak GB Demand as defined in the Glossary and presented in Electricity Demand. Accordingly, this chapter reports on all power stations directly connected to the GB transmission system, whether they are classified as Large, Medium or Small, all directly connected External Interconnections with External Systems and all Large power stations, which are embedded within a User System (e.g. distribution system).

Electricity Demand does not include demand which is supplied by embedded Medium and Small power stations or embedded External Interconnections with External Systems. Likewise, this chapter does not include information on these sources of generation. Such information is, however, included in Embedded and Renewable Generation.

Information provided in this chapter includes existing generation capacity, new generation capacity, generation disconnections, generation decommissionings, generation plant mix in terms of fuel type, geographic and system generation disposition

The chapter concludes with a short section on 'Generation Terminology'. Readers who are unfamiliar with current terminology are advised to first read that section before moving on to the main body of the chapter.

Scope

In recognition of the uncertainties associated with the future, unless otherwise stated the information presented in this chapter relates to existing generation projects and only those proposed new generation projects, which are deemed most likely to proceed to completion. Accordingly, proposed future projects, which are classified as "Transmission Contracted" are included. The terminology used in this chapter is defined in the Glossary and discussed in Generation Terminology.

An exception to this general rule is Alcan's Lynemouth power station, which is embedded, Licence exempt and Large but currently has yet to sign a Bilateral Agreement. However, this power station does exist and is capable of spilling large amounts of power onto the system (circa. 420MW). In consequence, it is subject to special treatment in this GB SYS in that it is treated as "Transmission Contracted". Its capacity is not netted of the demand forecasts submitted by Users but, instead, is included as generation capacity used to meet the ACS Peak GB Demand.

The SYS Background

The generation background presented in this chapter, together with the 'User' based demand background and the transmission background described in Electricity Demand and GB Transmission System respectively, form the basis of the SYS background upon which most of the studies and analyses presented in this Statement are based. These three elements of the SYS background (namely: demand; generation; and transmission) are internally consistent. For example, the transmission background of Chapter 6 includes all transmission connection developments cited explicitly in the relevant Bilateral Agreement as being necessary to permit the connection of the generation contained in the generation background presented in this chapter. It is worth repeating, however, that the SYS background does not include any transmission development that may be needed to accommodate prospective projects of new generation or demand, which did not have an appropriate Bilateral Agreement in place on the Data Freeze Date of 31 December 2007.

Consents Status (S36 and S14)

The requirements for generation projects to obtain the necessary consents (i.e. under Section 36 of the Electricity Act 1989 and Section 14 of the Energy Act 1976) is explained in Market Overview. Many of the tables giving information on generation introduced later in this chapter include an indication of whether that plant has obtained section 36 and/or section 14 (where appropriate) consents or not. This information is useful when considering the relative likelihood of a project proceeding to completion.

For completeness, Table 3.2 and Table 3.3 have also been included. Table 3.2 lists power stations, not yet under construction, for which section 36 and/or section 14 consent has been given. Table 3.3 lists power stations, not yet under construction, for which section 36 and/or section 14 is currently under consideration. The information relating to England and Wales has been sourced from the Department of Trade and Industry. The information relating to Scotland has bee sourced from the Scottish Executive.

Finally, Figure A.1.5 shows the location of National Parks in England, Wales and Scotland. Consents may be easier to obtain outside these areas.

Commissioning Dates

The commissioning year given will normally correspond to both the 'contract' date and the assumed date of actual full commercial output from the plant in question. However, in some cases full commercial output may slip into the years following the contract date. In such cases, the assumed generation commissioning dates given reflect the advice of the relevant generator.

Rather than strict adherence to a formal transmission contracted position, pragmatic assumptions relating to commissioning dates in the earlier years were, where considered appropriate, adopted in previous Seven Year Statements in order to enhance the relevance of the information provided. Such assumptions were made without prejudice and were intended to recognise the extant consent status of the plant in question and the progress towards completion of the project.

However, in this year's Statement no such pragmatic assumptions were considered necessary. Nevertheless, Table 3.4, which would normally list any generation projects affected by such assumptions, has been retained for completeness.

Generation Capacity

Power Station Capacities

Table 3.5 presents details of all power stations falling within the scope of this chapter including the output capacity of each over the seven year period, 2008/09 to 2014/15. Amongst other things, Generation Terminology explains that the relevance of the generation capacity terms Transmission Entry Capacity (TEC), Connection Entry Capacity (CEC) and 'Size of Power Station' is a function of the type of Bilateral Agreement in force. For a Bilateral Connection Agreement (BCA), both TEC and CEC are relevant. For a Bilateral Embedded Generation Agreement (BEGA) only TEC is relevant. For a Bilateral Embedded Licence Exemptable Large Power Station Agreement (BELLA), neither TEC nor CEC exists and the term 'Size of Power Station' becomes relevant.

In Table 3.5 the type of power station capacity (i.e. TEC or 'Size of Power Station') given for each of the seven years is denoted by an appropriate entry (i.e. 'yes') in the columns headed 'TEC' and 'Size of Power Station' towards the right hand side of the table. Where CEC is relevant (i.e. for a BCA) a separate entry is included in the column headed 'CEC'. Please note that values of CEC are given in respect of year 2008/09 only.

The information is presented on the basis of Licensee then on power station type. For ease of reference, the SYS Study Zone, in which each Power Station is located, is also given as is the Tariff Zone. The SYS Study Zones are explained under SYS Boundaries and SYS Study Zones and Tariff Zones are explained under Use of System Tariff Zones.

Please note that the External Interconnection between Scotland and Northern Ireland (Moyle Interconnector Ltd) normally operates in export mode. However, a TEC of 80MW import has been registered for this Interconnector and this is reflected in Table 3.5 . . Other tables in this Statement may include a more pragmatic figure to reflect export (rather than import) from Scotland to Northern Ireland as being the likely mode of operation at times of the GB system peak demand. An example is Table 7.1 (GB Generation Ranking Order) presented in GB Transmission System Performance. There are a number of other differences between Table 3.5 , which is intended to provide information on the formal contracted (TEC) position, and Table 7.1, which includes a number of informed pragmatic assumptions designed to reflect the likely operation of generation sources at peak for the purpose of power flow analyses.

Inspection of Table 3.5 reveals that the aggregate power station capacity (TEC and/or 'Size of Power Station') rises from 79.9GW in 2008/09 to 110.1GW by 2014/15. This is an overall increase of 37.8% or 30.2GW over the period from the 2008/09 winter peak to the 2014/15 winter peak. This net increase is made of the following

- an increase of 13.9GW in CCGT capacity (17.4%);
- an increase of 6.2GW in onshore wind generation capacity (7.8%);
- an increase of 2.5GW in offshore wind generation capacity (3.2%);
- an increase of 3.3GW in coal generation capability (4.2%);
- an increase of 1.8GW in new import capability (2.3%)
- an increase of 402MW in Biomass capacity (0.5%);
- an increase of 108MW in Hydro capacity (0.1%); and
- a decrease of 1.45GW in Nuclear Magnox capacity (1.8%).

The largest change is due to the 13.9GW increase in CCGT plant capacity, which constitutes a 17.4% increase in overall capacity over the period. On this basis, the capacity of CCGT plant will overtake that of coal by 2009/10. By 2014/15, CCGT capacity will exceed coal capacity by 8.2GW and account for 36.0% of the total transmission contracted installed generation capacity.

The second largest increase is due to the growth in Wind generation, with onshore wind accounting for an 7.8% increase and offshore wind accounting for a 7.4% increase in overall capacity. Wind generation capacity (both onshore and offshore) is set to rise to 12.1GW by 2014/15.

The above capacities do not include the embedded Medium and Small generation and embedded External Interconnections with External Systems. The capacity of such embedded generation sources is the subject of Embedded and Renewable Generation.

It should be remembered that the above figures reflect the current contracted position and take no account of future uncertainty. As mentioned previously, it is reasonable to suppose that further new applications for power station connections will be received and, at the same time, some existing contracts may be modified or terminated and some existing power stations will close.

Generating Unit Capacities

The 'effective output' capacity of each Generating Unit is given in Table 3.6 along with a range of additional data relevant to individual Generating Units or ‘sets’ within each power station. The 'effective output' is simply the Registered Capacity of each Generating Unit scaled down, where both appropriate and necessary, such that the aggregate output of all Generating Units at a power station is limited to the value of the relevant Power Station TEC. This would not be ‘appropriate’ for a generating unit generating unit covered by a Bilateral Embedded Licence Exemptable Large power station Agreement (BELLA), since a BELLA power station does not have a TEC. Nor would it be ‘necessary’ should the aggregate unit Registered Capacity at a power station be equal to or less than the station TEC. For ease of reference, the SYS Study Zone is again included. Table 3.6 reflects the contracted position for the winter peak of 2014/15 as known at the data freeze date of 31 December 2007.

Three phase fault infeeds and reactive ranges are also given and these are at the interface between the Generating Unit and the GB transmission system i.e. on the higher voltage side of the generator transformer. This information is supplied to us by Users as part of their Week 24 Grid Code submissions.

Generation Capacity Additions

Table 3.7 lists the changes in the installed generation capacity of generation, which has either actually commissioned or is projected to commission, over the period from the winter peak of 2000/01 to the winter peak of 2014/15. Please note that the capacities up to and including the winter peak of 2002/03 are based on power station Registered Capacity (RC) while the capacities for 2003/04 onwards are based on either power station Transmission Entry Capacity (TEC) or power station ‘Size of Power station’, as appropriate (TEC being appropriate for BCA and BEGA power stations and ‘Size of Power Station’ being appropriate for BELLA power stations.

Unlike Table 3.6 , Table 3.7 does not include any subsequent increases or decreases in capacity of plant which was commissioned before the year 2000. Thus, while Table 3.6 includes the 1450MW reduction due the closure of Magnox stations, Table 3.7 does not.

However, as well as new (i.e. commissioned, or to be commissioned, from year 2000 onwards) transmission contracted generation, the table does also include increases due to plant being returned to service from reserve (or closure), increases in import capabilities from External Systems, and some minor proposed changes in TEC. For consistency between the various tables presented in this Statement, all generation expected to commission before the winter peak of 2007/08 is classified as ‘existing’.

The status of each development is shown in terms of whether the station is existing (by the winter peak of 2008/09), under construction and otherwise whether both S36 and S14 (where relevant) consents have been obtained. A zero entry (e.g. Netherlands Interconnector Stage 1) has been used for projects where a Modification Application has been submitted, or is to be submitted, to vary the construction programme/commissioning date. The year of the zero entry indicates the original contracted commissioning date.

The annual commissioning stream included in the penultimate line of Table 3.7. . This may be used as an indicator to the future level of activity over the period. A relatively high level of activity in relation to capacity increases is indicated for the year 2009/10 (8.3GW). In this year some 18% of the new capacity is from onshore wind generation to be located in Scotland. Similarly, some 12.6% of the new capacity is from offshore wind generation to be located in England and Wales. It is worth remembering, however, that, in the event, there may well be a more graded increase in activity over a number of years. The fact that a project is currently 'transmission contracted' is not an absolute guarantee that the project will proceed to completion since there are other factors, which may also influence that outcome (e.g. financing, fuel prices, consents etc.).

Overview of Generation Capacity Additions

Table 3.8 complements Table 3.7 by providing an overview of the generation capacity additions over the period from 2000/01 to 2014/15. For instance, of the 42.2GW of additional transmission contracted capacity since 2000/01, 20.4GW or 48% is CCGT plant and 13.9GW or 33% is due to wind farms (both onshore and offshore). Similarly, of the 16.9GW of new contracted capacity either existing or under construction, 11.7GW or 69% is CCGT plant and 1.5GW or 9% is due to wind farms.

Table 3.8 also separately identifies the capacity of future plant by type and according to whether the necessary consents have been obtained.

Additional Contracted Generation Capacity

Table 3.9 lists generation projects, that have become classed as transmission contracted since 11 December 2006. In effect, this means since the data freeze date for the information published in our 2007 issue of the GB Seven Year Statement. The table shows that, since that time, Bilateral Agreements have been entered into for just under 7GW of new generation capacity. This includes: 3325MW of coal-fired generation on the NGET system; 1650MW of offshore wind farms on the NGET system; 1455MW of CCGT capacity on the NGET system; 500MW of interconnector capacity on the NGET system; and 60MW of onshore wind generation on the SHETL system.

Disconnections

Disconnection is normally the irreversible closure of a power station and requires formal notification to be given to us at least six months prior to the event. Table 3.10 10 lists notified generation disconnections (closures) since the year 2000 inclusive. In total there is 6.7GW. Please note that the capacities up to and including the winter peak of 2002/03 are based on power station Registered Capacity (RC) while the capacities for 2003/04 onwards are based on power station Transmission Entry Capacity (TEC). The year indicated on the table is the year of closure and normally implies that the power station will not be generating over the subsequent winter peak. In the case of Dungeness A and Sizewell A, both stations were actually closed on 31 December 2006, which is within the 2006/07 winter peak period.

Decommissionings

Decommissioning also requires six months formal notification but is not irreversible. Generating Units with a notified Registered Capacity of zero are, for the purpose of this Statement, in the same category as decommissioned plant.

A Generator may wish to decommission or mothball a Generating Unit for a relatively long period for commercial reasons. In such an event the Generator may also wish to affect a corresponding reduction in the power station TEC in order to reduce the Use of System charges. At a later date, he may choose to ‘re-commission’ the generating unit and return the Power Station TEC to its appropriate value.

As explained in PC.4.3.1 of the GB Grid Code, NGET use the TEC data (and CEC data for that matter) from the relevant Connection and Use of System Code (CUSC) Contract. The value of TEC is specified in Appendix C of the appropriate Bilateral Connection Agreement or Bilateral Embedded Generation Agreement. These are agreements entered into pursuant to paragraph 1.3.1 of the CUSC.

Paragraph 6.30 of the CUSC explains how revisions to the value of TEC may be made. TEC may be decreased provided that certain specified notice is given to National Grid. Generators are entitled to request an increase in TEC, up to a maximum of the relevant CEC, through the more protracted Modification Application process.

Where we have received notification from the Generator (in accordance with the CUSC requirements) that a particular generation source is to reduce its value of TEC, then the reduced value is accordingly attributed to that plant for the purpose of the power flow studies and analyses contained in this Statement. In the extreme, we may receive notification that a particular plant has reduced TEC to zero. This could, under certain circumstances, mean that additional transmission reinforcement work would be required before such plant is able to subsequently re-register TEC at a higher level and this may cause a delay. In view of this, the Generator may choose to maintain the value of Power Station TEC throughout in order to avoid any subsequent delays. Increases in station TEC above the extant contracted value are not possible without an appropriate Modification Application from the generator to us to modify the site specific Bilateral Agreement.

Where the Generator has notified us that the Output Usable is zero (e.g. unavailable due to maintenance), the full value of station TEC is still attributed to that plant for the purpose of power flow and fault level studies. This ensures that no transmission reinforcement, and possible delay, will be necessary when the plant is repaired and returned to service.

Table 3.11lists Generating Units which have either been formally notified by the owner as decommissioned (effectively RC=0) or simply notified zero Registered Capacity covering the seven year period of this Statement. In either event they may effectively be classed as unavailable. The year shown is the year in which the decommissioning took place. The capacity shown is the capacity prior to decommissioning. Please note that decommissioning is commonly on a generating unit basis for which the terms Registered Capacity or Connection Entry Capacity apply. Transmission Entry Capacity relates to the power station and does not exist on a unit basis. However, the values of RC given in Table 3.11 may be taken as an equivalent reduction in power station TEC.

To provide a more complete picture, the table includes both positive and negative entries; a positive entry indicating when a plant is decommissioned; and a negative entry when a plant is returned to service. Accordingly, the table indicates that unit 1 at Fawley was decommissioned in 1994 (indicated by a positive entry) and returned to service in 2006 (indicated by a negative entry). Similarly, units 1A, 1B, 1S, 2A, 2B, 2S at Killingholme were decommissioned over the period 2002 to 2004 and returned to service in 2006.

Table 3.11 shows that there is currently an overall reduction in potential power station capacity of some 2.9GW comprising: 534MW of OCGT plant; 2035MW of Oil plant; and 350MW of Coal plant. However, it is unlikely that all this capacity could be returned to service. Of the 2.9GW, perhaps some 500MW to 1GW has the greatest potential to return to service. Even then, it should also be borne in mind that, were individual plants to be re-commissioned/returned to service, the full previous capacities may not necessarily be realised.

Interconnections with External Systems

The GB transmission system currently has directly connected External Interconnections with the External Systems of France and Northern Ireland. The commissioning of an External Interconnection with the Netherlands system is planned for 2010/11. The commissioning of an External Interconnection with the Republic of Ireland system is planned for 2011/12. The opportunities for making use of these External Interconnections are outlined in Opportunities. Table 3.12 sets out the notional import and export capabilities across each of the External Interconnections and the normal direction of flow.

Please note, however, that the transfers given in Table 3.12 reflect the capabilities of the Interconnectors. Other tables in this Statement may show different transfers depending on the purpose of the table. For instance, Table 3.5 is designed to reflect the formal (TEC) position and consequently shows an import into Scotland of 80MW across the Northern Ireland Link, and an import into Wales of 500MW across the Republic of Ireland Link. The demand forecasts shown in rows 1 and 3 of Table 2.1include a 300MW export from Scotland to Northern Ireland, and a 500MW export from Wales to the Republic of Ireland.

Table 7.1 (GB Generation Ranking Order) presented in GB Transmission System Performance includes a number of informed pragmatic assumptions designed to reflect the likely operation of generation sources at peak for the purpose of power flow analyses. Table 7.1 includes an export from Scotland to Northern Ireland over the Interconnector of 300MW, which is shown as negative generation. Table 7.1 also includes an export from Wales to the Republic of Ireland over the Interconnector of 500MW, which is shown as negative generation.

Cross-Channel Link

The cross-channel link with France is a DC link consisting of four pairs of cables connecting converter stations at Sellindge in Kent and Les Mandarins near Calais. The 1988 MW import level at peak, which is applicable throughout the seven year period, is net of Interconnector losses. At peak, the link is normally used for imports to the GB transmission system.

Northern Ireland Link

The link between Scotland and Northern Ireland was commissioned in December 2001 with commercial operation commencing in January 2002. The interconnector is a DC link connecting converter stations at Auchencrosh in the 'South' zone of the SPT system, which corresponds to SYS Study Zone Z6, and Islandmagee in Northern Ireland. SYS Study Zones are explained under SYS Boundaries and SYS Study Zones. The 500MW Auchencrosh converter station is supplied by a 275kV overhead line from Coylton substation and this is shown in Table 3.12.

Although this Interconnector can operate with power flows in either direction, the power flow has been predominantly from Scotland to Northern Ireland. While the link has both an export and import capability, it is normally used for export to Northern Ireland. An export (i.e. a demand) of 300MW may be assumed for the winter peak of each year for the purpose of power flow analyses. This transfer to Northern Ireland may be treated as being equivalent to demand and has been taken into account in the demand forecasts of Chapter 2.

Netherlands Link

A DC link for interconnection with the Netherlands electricity system is planned to commission in 2010. The link will be of capacity up to 1320MW, capable of bi-directional flow, and will be connected at Grain 400kV substation. At peak, the link will normally be used for imports to the GB transmission system.

Generation Mix

Figure 3.1 illustrates the main changes, since 2000/01, in the generation capacity of transmission contracted plant. For the underlying detail please refer to: Table 3.7 (changes in station capacity); Table 3.10 (closures); and Table 3.11 (unavailable plant). The level of capacity reductions does not change beyond 2010/11. This partly reflects the fact that generators are not required to provide formal notification of disconnections or decommissioning until 6 months prior to the event. The potential relatively high level of activity in 2009/10, referred to previously when considering Table 3.7, is evident in Figure 3.1 in the large step increases in additional capacity in those years.

Figure 3.1

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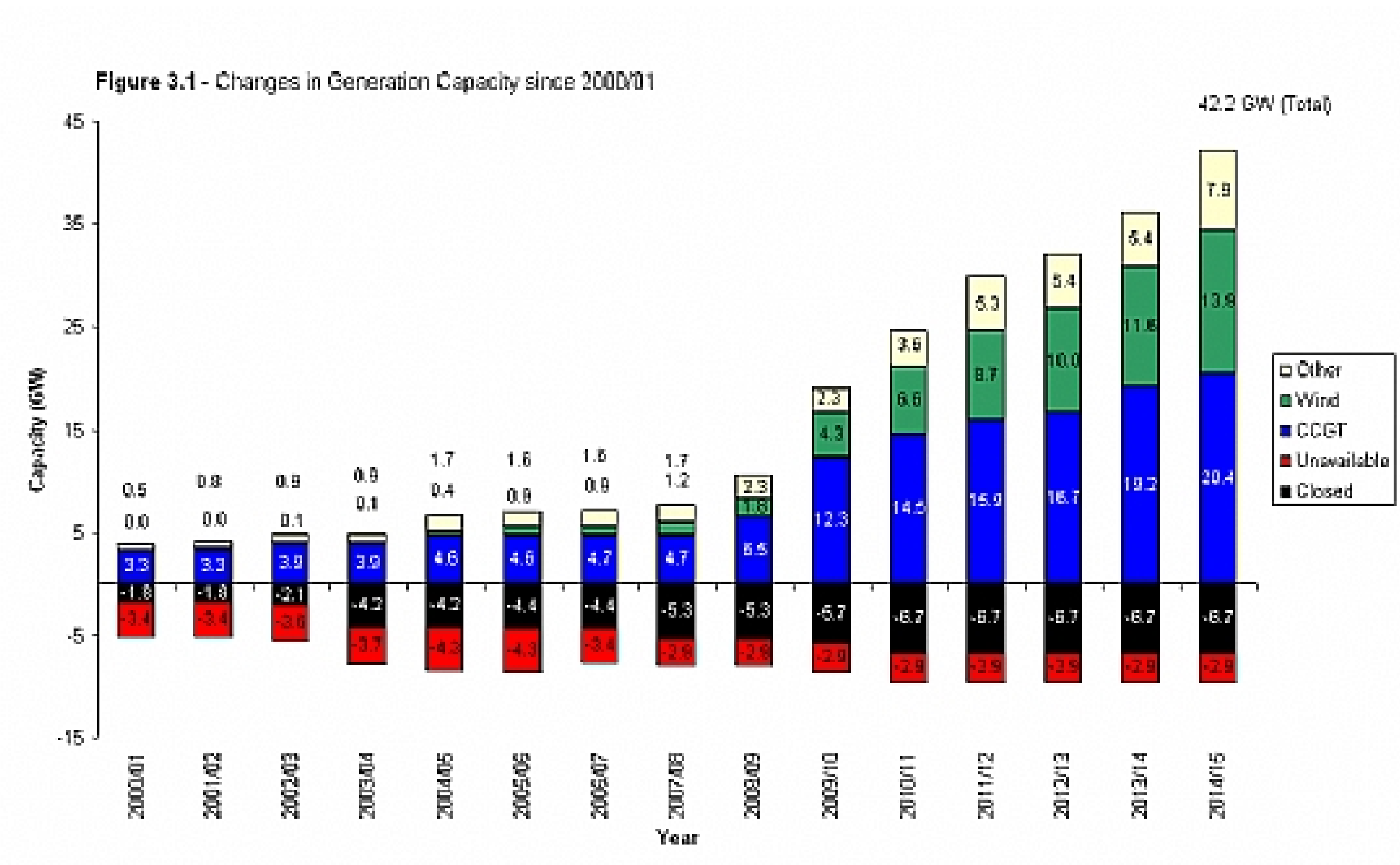
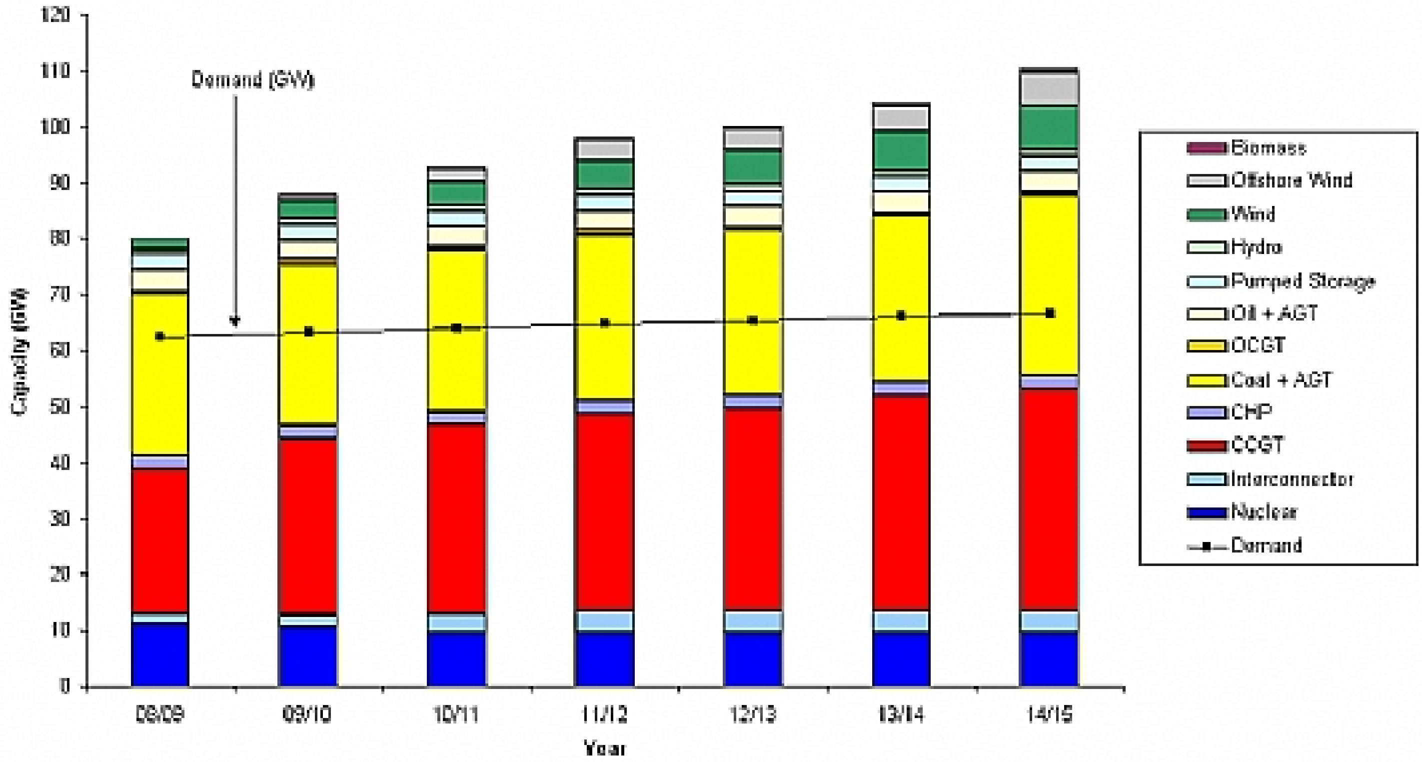


Figure 3.2 illustrates the generation mix from 2008/09 to 2014/15 and includes all transmission contracted generation whether existing or planned (i.e. the 'SYS background') based on Table 3.5 . The customer-based demand forecast of row 5 of Table 2.1 has been superimposed on the generation mix to give an indication of the apparent surplus of generation over demand Plant Margin. The demand forecast of row 5 of Table 2.1 was selected as being the most appropriate for this comparison since that forecast not only excludes station demand but also excludes exports to Northern Ireland and the Republic of Ireland, making it compatible with Table 3.5, which includes TEC of 80MW for imports from Northern Ireland, and TEC of 500MW for imports from the Republic of Ireland from 2011/12 onwards. The different fuel types are given in approximate order of economic operation. Please note, however, that this is indicative only and no account has been taken, for instance, of generation availability. Nevertheless, the figure does imply a variation in the type of marginal plant used to meet the demand over the seven years considered. There is a reduction in coal capacity used to meet the demand; not so much in absolute terms, since future as yet unnotified closures are not included, but rather in relative terms. In the later years, the closure of Magnox plant by 2010/11 is offset by the growth in Interconnector, CCGT and Wind generation capacity both in absolute and relative terms

Figure 3.2

Click to load a larger version of Figure3.2 image

Figure 3.2 - Existing and Planned Transmission Contracted Generation



In considering the above information it is important to note the following three points:

- the generation capacity estimates do not take account of the possibility of modification of existing connection agreements, additional new connection agreements being signed, possible future closures which have not yet been formally notified to us for which only 6 months notice of closure is required or the return to service of plant held in reserve;
- whilst there has been some 42.2GW of additional contracted generation capacity since 2000/01, only 7.3GW is in service (by 2008/09), 9.6GW is under construction and construction work on the remaining 25.3GW (8.7GW of CCGT, 3.3GW of coal, 12.3GW of wind farms, 0.5GW of Interconnection capacity and 402MW of Biomass) has not yet started (see Table 3.8) as at the data freeze date of 31 December 2007; and
- the full import capability has been assumed for the External Interconnections with France and the Netherlands.

Generation Disposition

Figure A.1.1 of Appendix A, gives the geographical location of all transmission contracted Large power stations, whether directly connected or embedded within a distribution system which are existing (as at 2008/09). Directly connected Medium and Small power stations are also shown as are directly connected External Interconnections with External Systems. These generation sources form the generation background contained within the 'SYS background'. Large power stations which have been formally disconnected (closed) are not shown (see Table 3.10) but Large power stations with decommissioned Generating Units are shown (see Table 3.11). Embedded Medium and Small power stations and embedded External Interconnections are not shown.

The disposition of the above existing plant, and prospective future plant, in terms of its capacity and location around the system is particularly important when considering the performance (e.g. resultant power flows) of the transmission system, the need for transmission developments and the opportunities for connecting further generation (or demand) to the system see GB Transmission System Performance , GB Transmission System Capability and Opportunities.

When considering bulk transfers of power around the system it is often useful to regard the transmission system as being made up of a number of zones. Such zones and the transmission boundaries between them are described in detail in SYS GB Transmission System. For consistency and ease of explanation, the generation dispositions described in the following paragraphs are also presented on a similar zonal basis.

Figure 3.3a , Figure 3.3b , Figure 3.3c , Figure 3.3d , Figure 3.3e and Figure 3.3f illustrate the change in total installed generation capacity by plant type for regions bounded by four of the main SYS Boundaries over the period 2008/09 to 2014/15. These regions of the system are referred to as Scotland (SHETL), Scotland (SPT), North, Midlands and South. The figures cover all transmission contracted generation (both existing and planned).

Figure 3.3a

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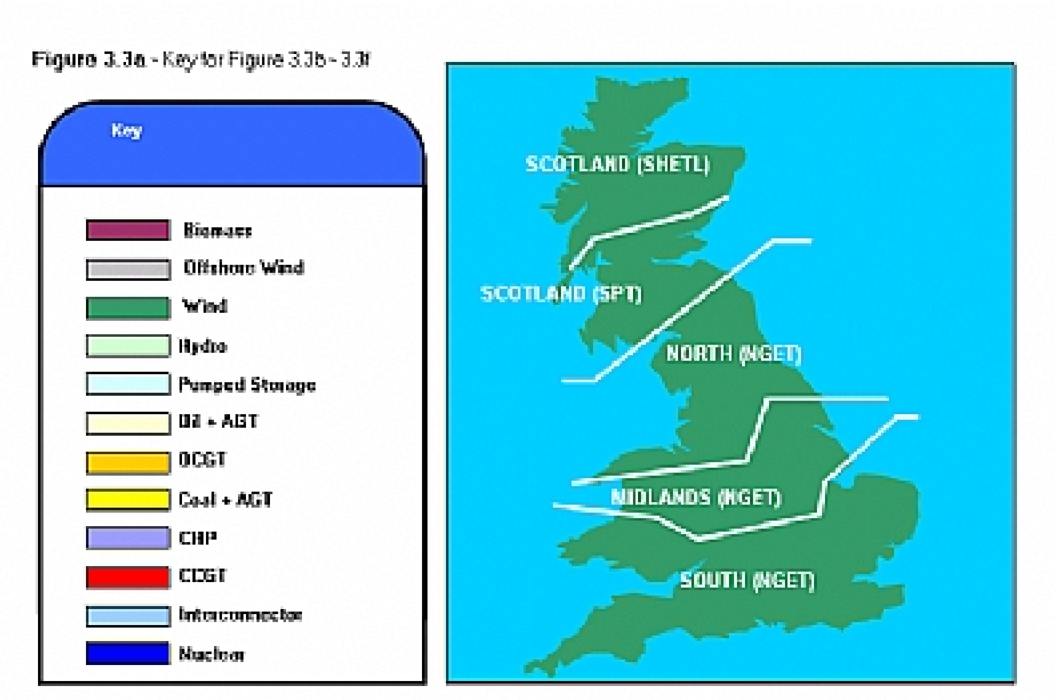

Figure 3.3b

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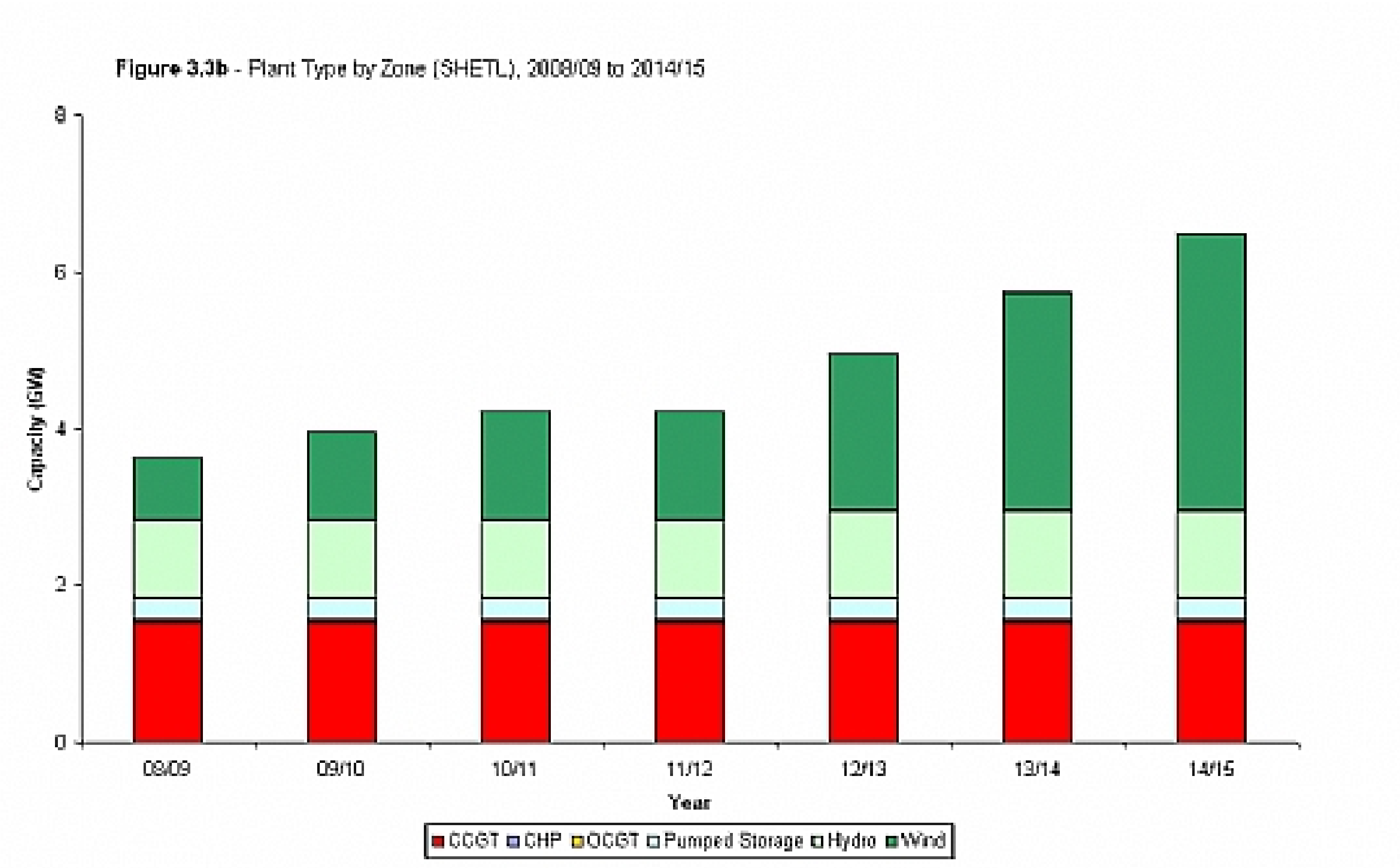

Figure 3.3c

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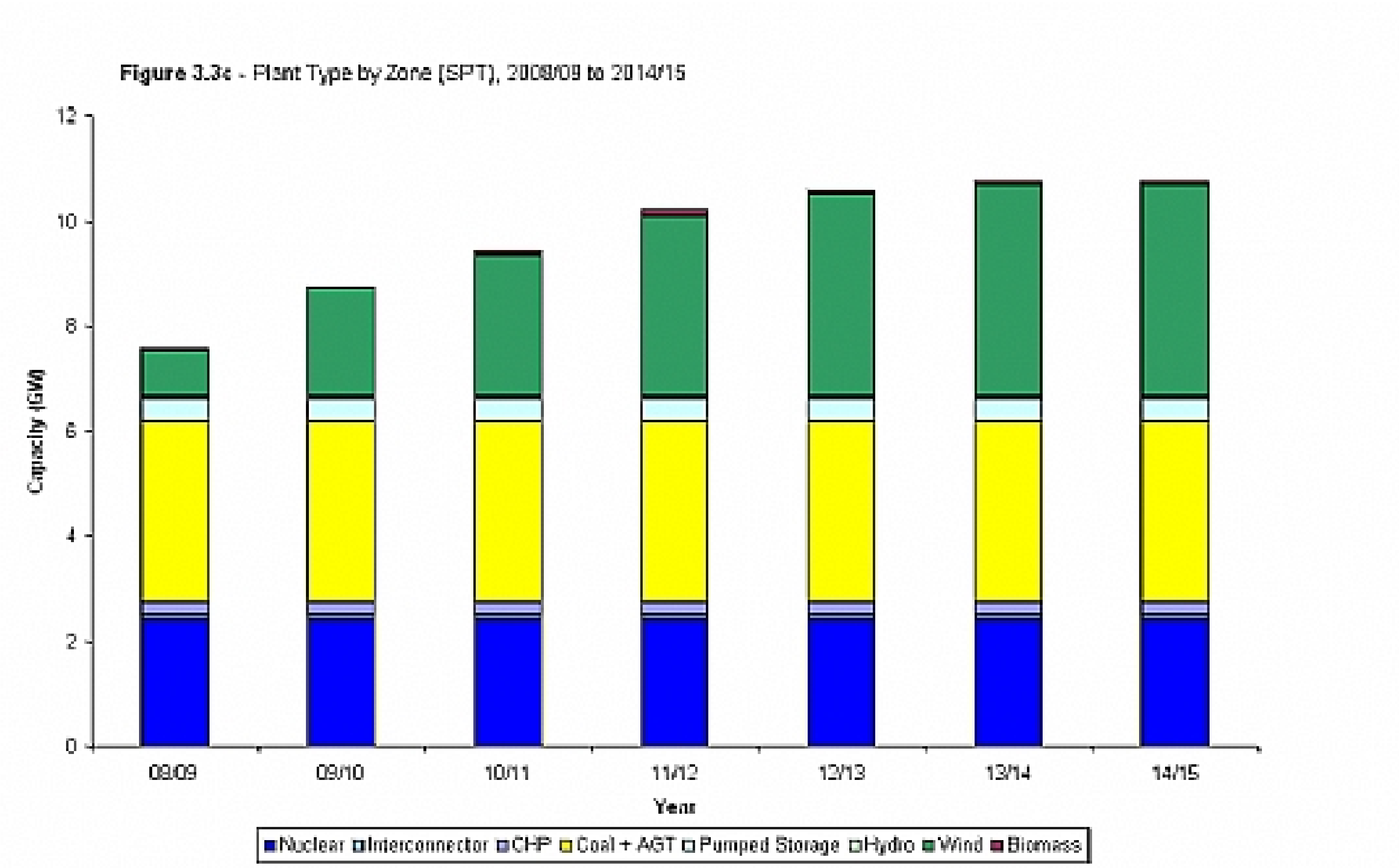

Figure 3.3d

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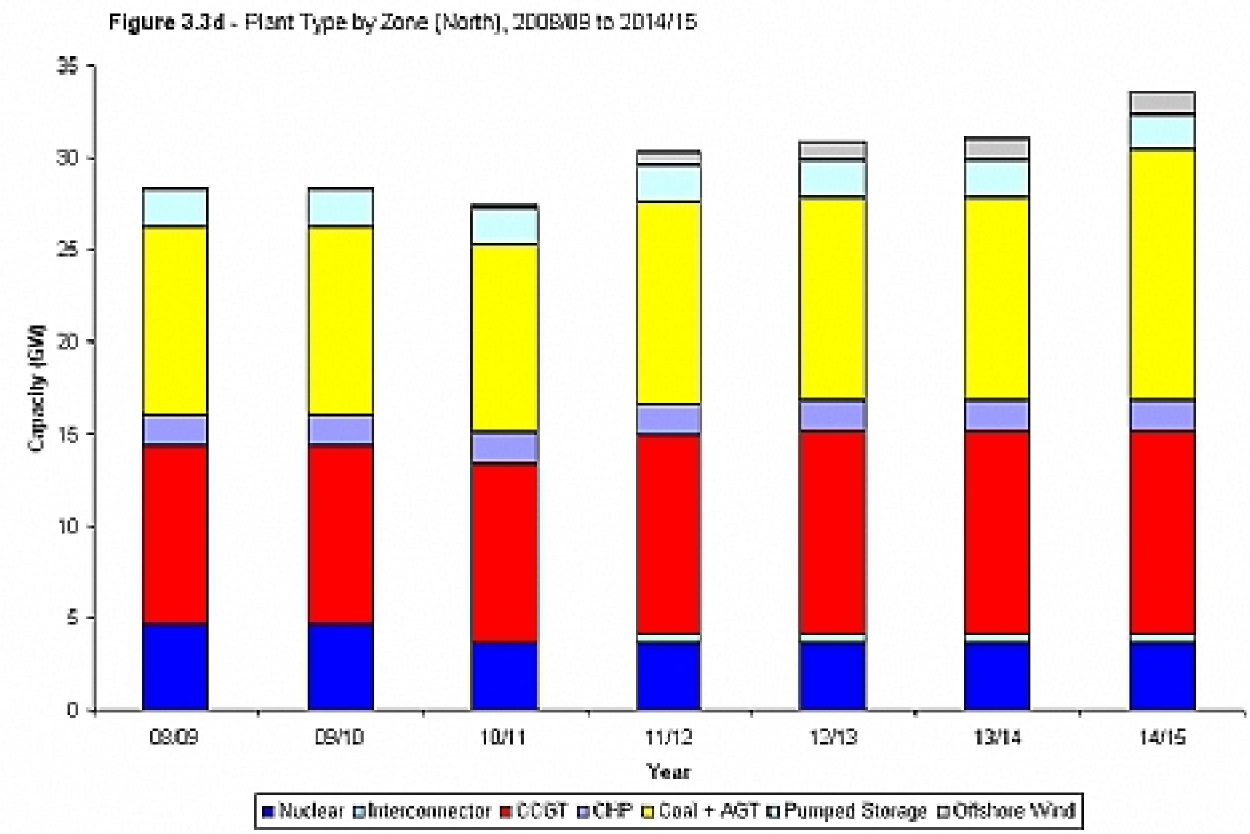

Figure 3.3e

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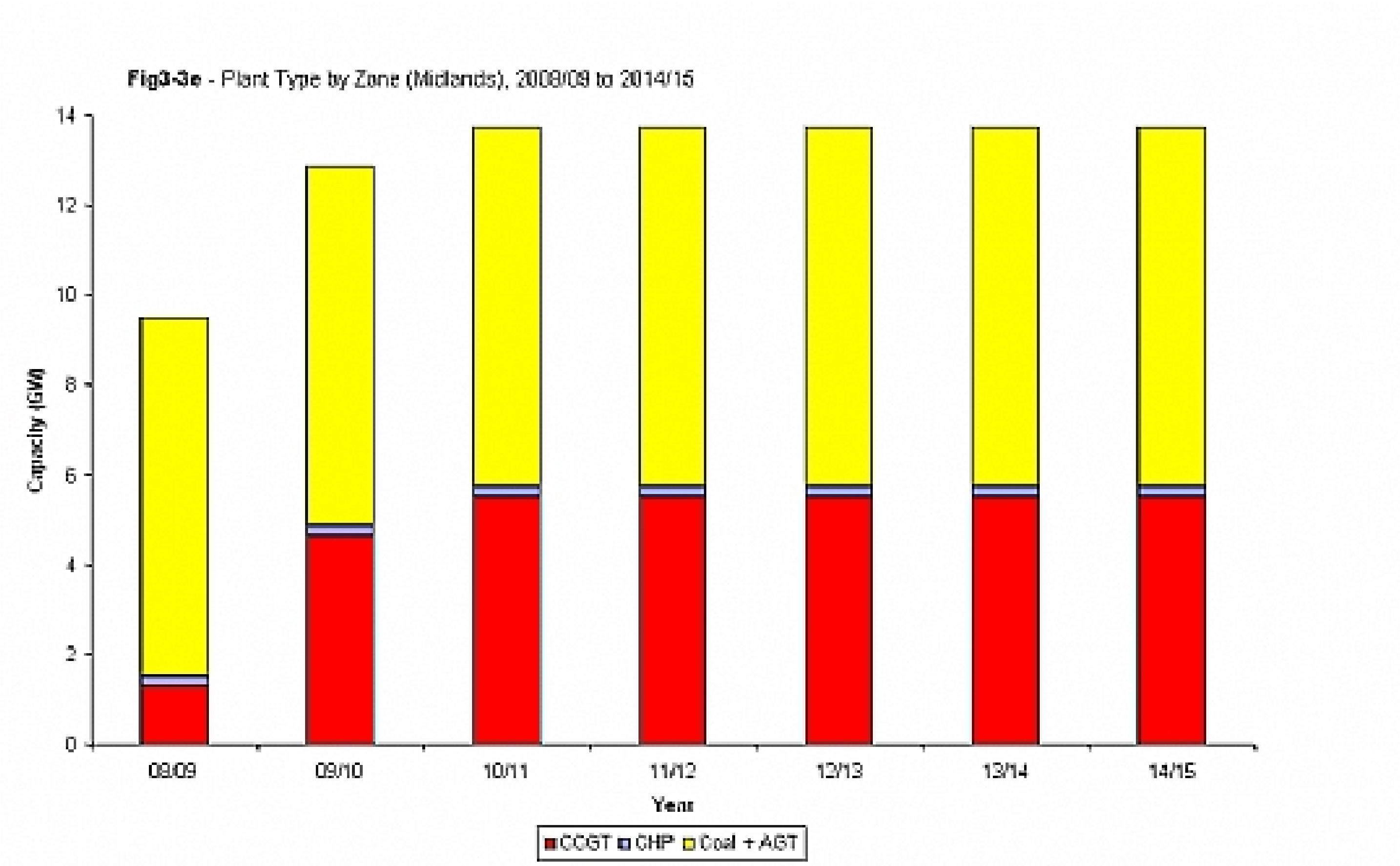

Figure 3.3f

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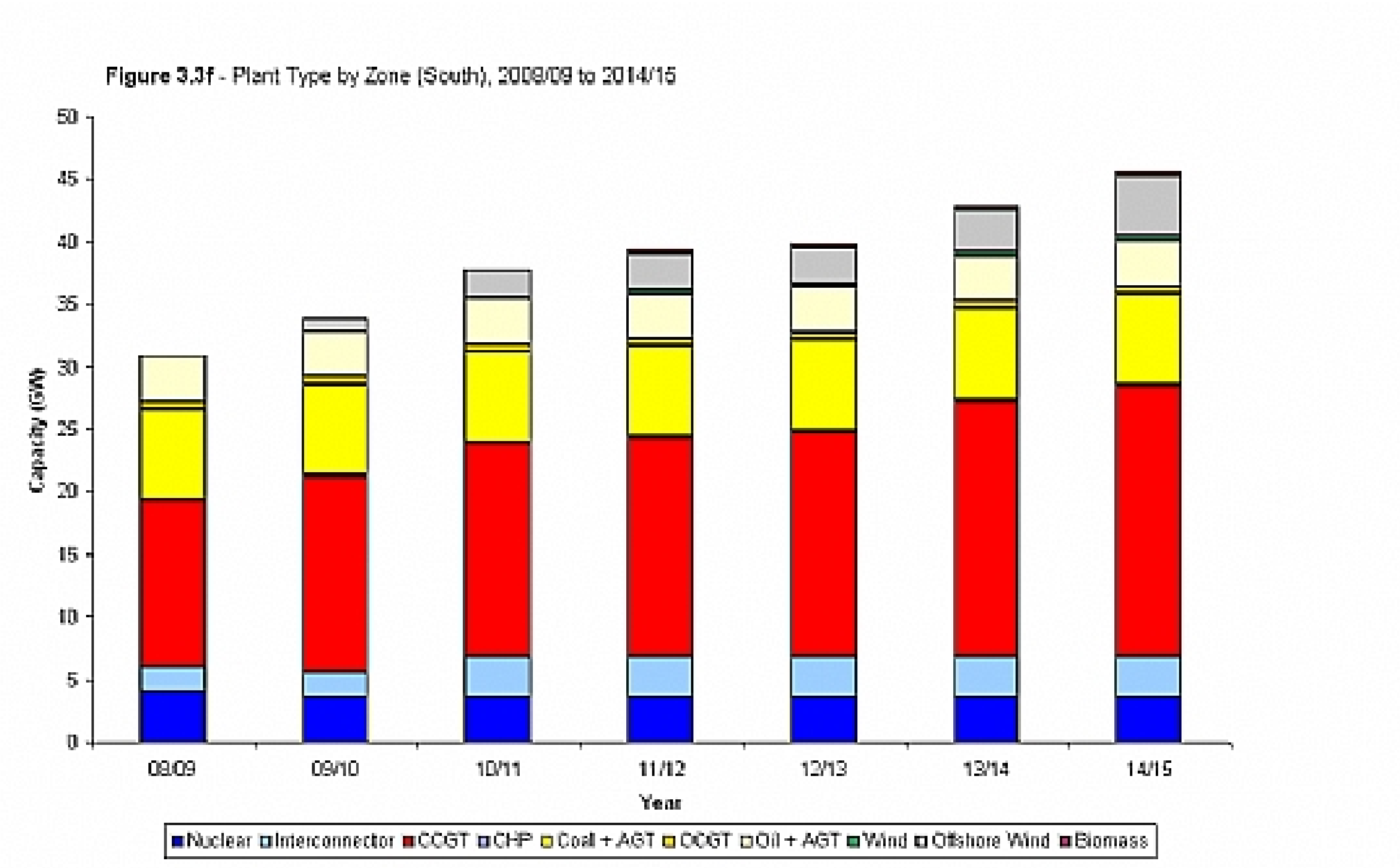

Figure 3.4 summarises the Scotland (SHETL), Scotland (SPT), North, Midlands and South disposition of all transmission contracted generation (both existing and planned) in the years 2008/09 and 2014/15.

The differences between the above spot years are detailed in Table 3.13 , which shows a 23.6GW increase in generation capacity over the period. The table details the capacity changes on a zonal bases. First, on the basis of the 'Major Zones' described in Figure 3.3a above. Second, on the basis of the more familiar SYS Study Zone Name (referred in Table 3.13 as 'Minor Zone') described in SYS GB Transmission System. Third, on the basis of the SYS Study Zone Number referred to in Table 6.4 . (and Table 3.13) simply as 'SYS Study Zone'.

Figure 3.4 shows that the installed generation capacity in the Scottish zones (SHETL & SPT), the South and the Midlands is growing in both real (MW) and percentage terms. The North zone displays growth in real terms but a decline in percentage terms.

Figure 3.4

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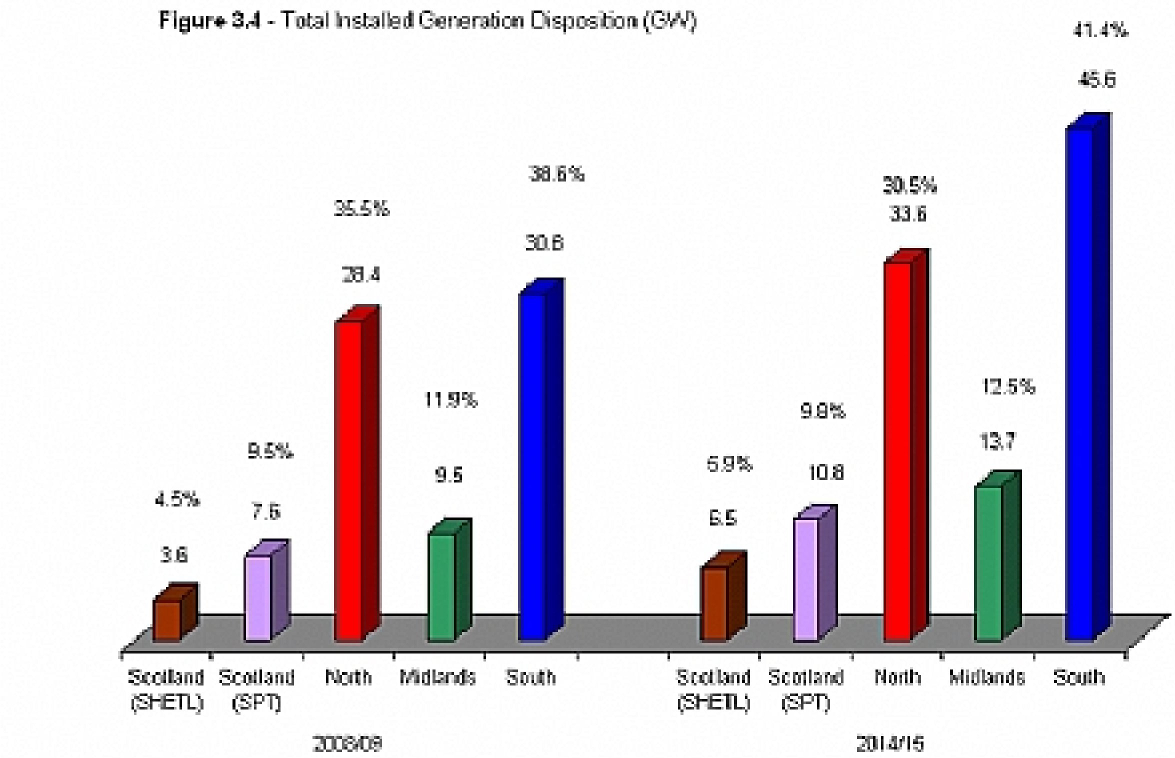

Figure 3.5 steps a little further back in time to illustrate how the disposition of new generation capacity has developed over the period 2000/01 to 2014/15.

Figure 3.5

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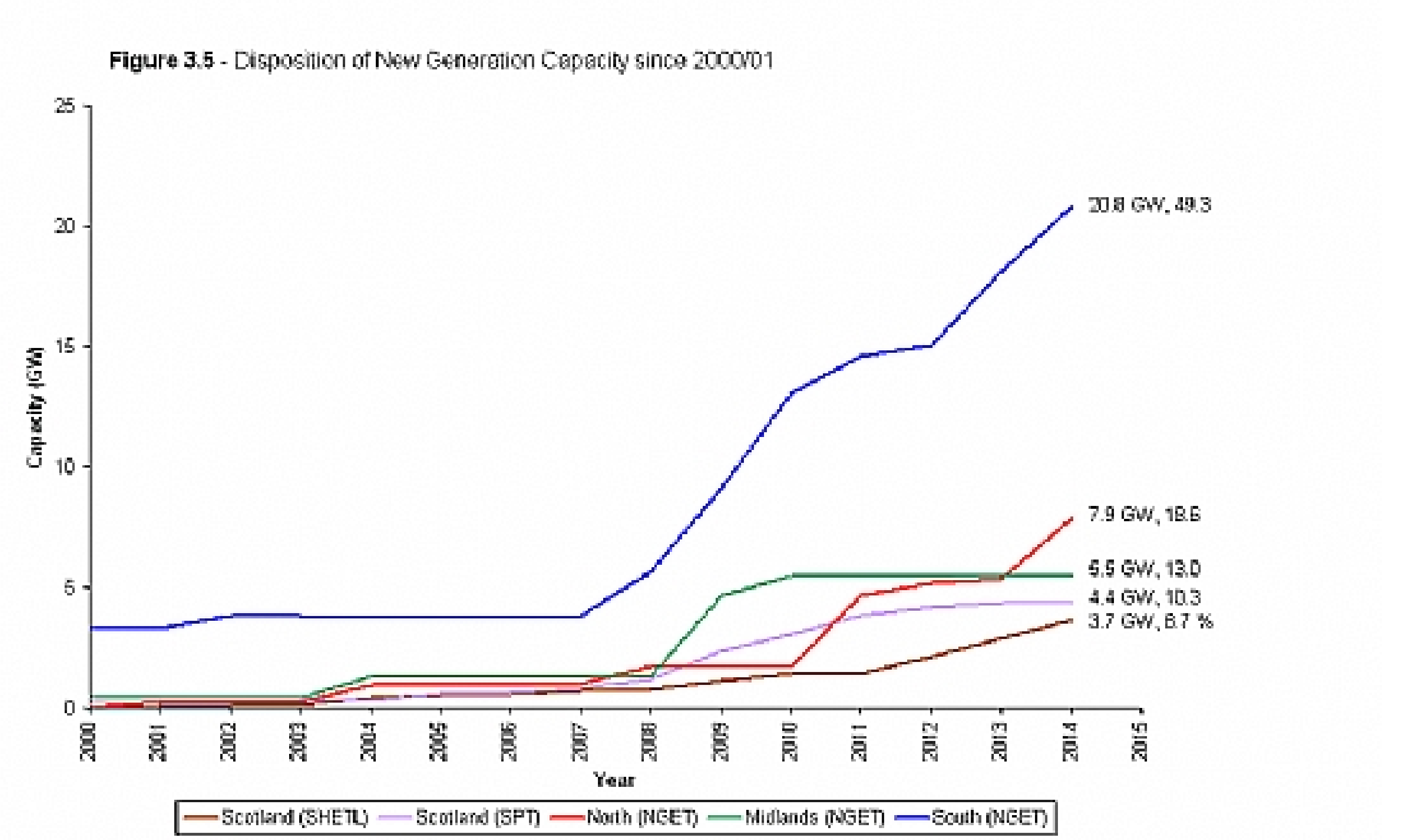

It should be remembered that Figure 3.3a to Figure 3.3f , Figure 3.4 and Figure 3.5 and Table 3.13 are based on installed generation capacities. However, more importantly, it is the generation actually used in meeting the demand on the day, which determines the power flows at any given time. The 'GB Generation Ranking Order', which is explained in GB Transmission System Performance, is used to determine which generation is operated for the study purposes of this Statement.

By way of illustration, Figure 3.6 shows the Scotland (SHETL), Scotland (SPT), North, Midlands and South disposition of installed generation (also shown in Figure 3.4) together with the regional ACS peak demand disposition. In both 2008/09 and 2014/15, the installed generation in Scotland (SHETL), Scotland (SPT), North and the Midlands exceeds demand, in some areas by a substantial amount. In the South, there is a more even balance in 2008/09 with demand exceeding installed generation by a small amount. However, by 2014/15 installed generation exceeds demand. Superficially, this would imply only relatively modest power transfers across the system.

Figure 3.6

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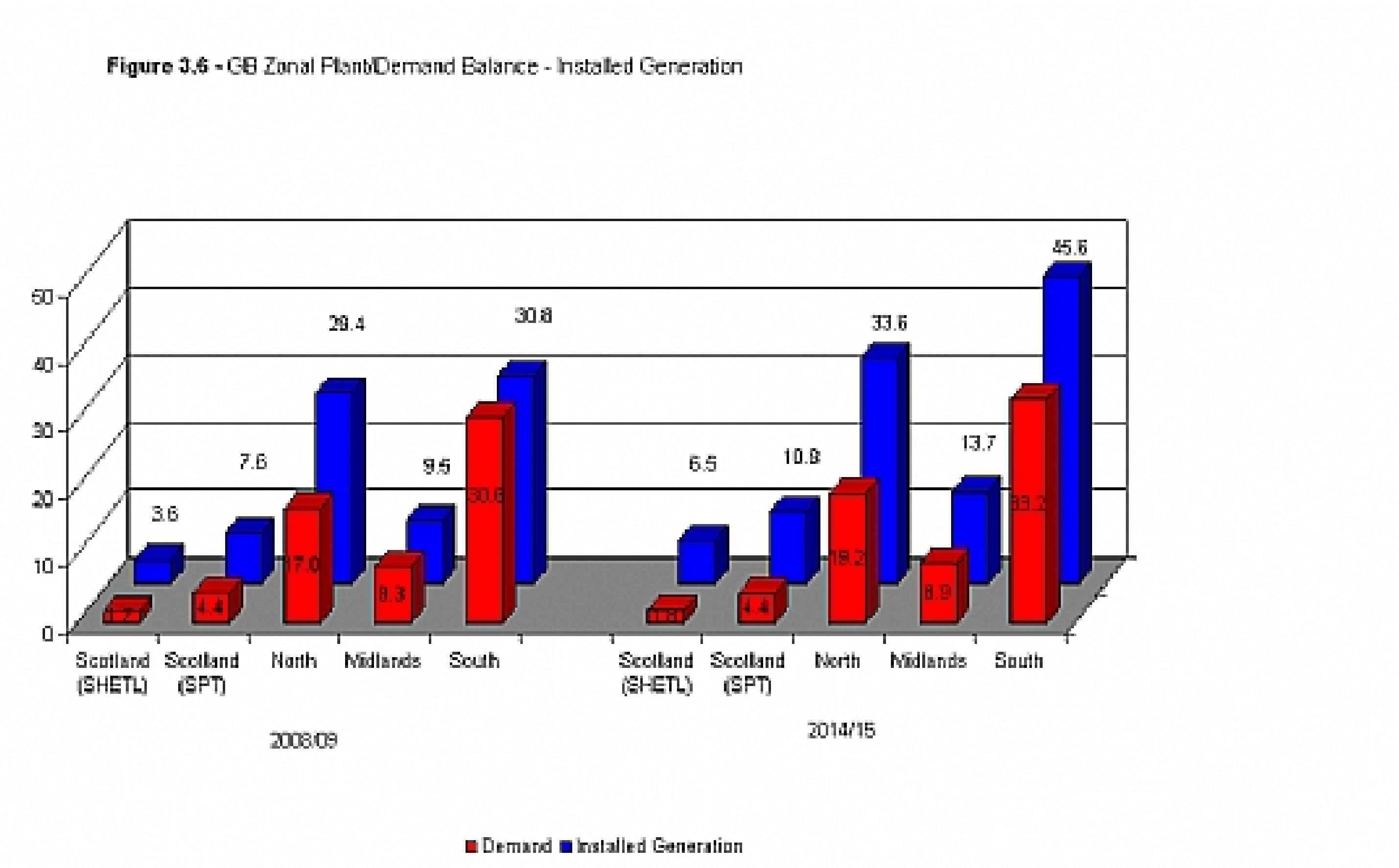

However, when the generation expected to be used to meet the demand is considered, a different picture emerges as illustrated in Figure 3.7. Again generation in Scotland (SHETL), Scotland (SPT) and the North exceeds demand in both years. However, in the Midlands and South much of the generation becomes non-contributory (i.e. not used in meeting the demand) such that the demand exceeds generation, by a substantial margin in the South, in both years; implying higher power transfers from the northern parts of the system, through the Midlands to the South. The power transfers at the time of peak under the 'SYS background', are reported in more detail in GB Transmission System Performance.

Figure 3.7

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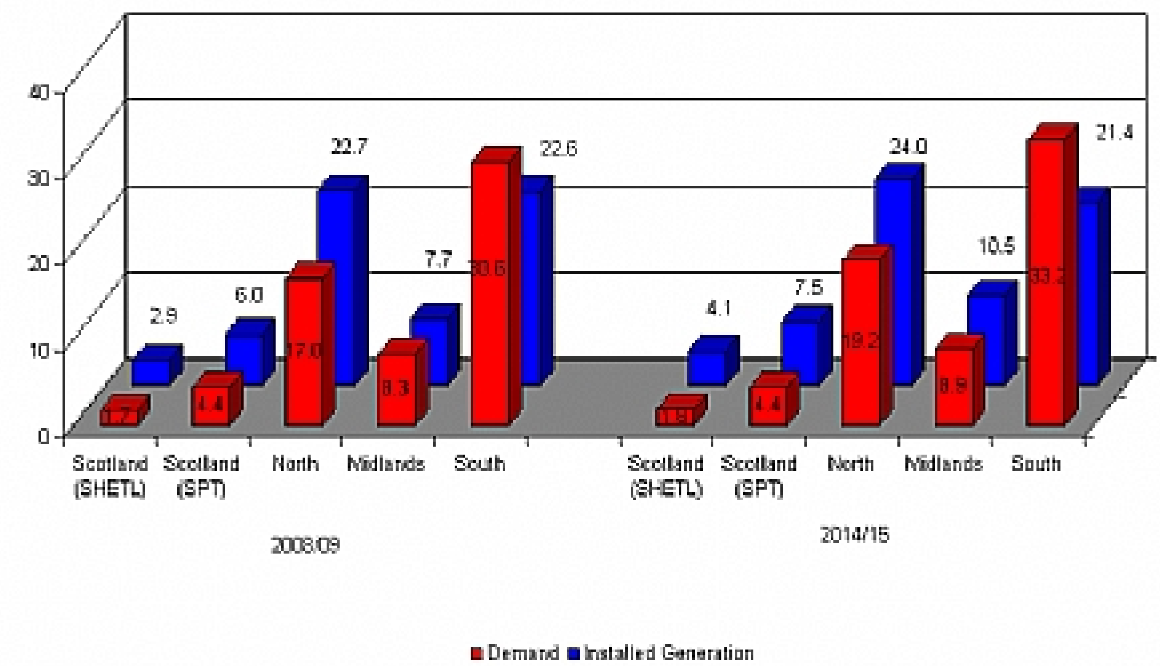
Figure 3.7 - GB Zonal Plant/Demand Balance - Studied Generation



Additional information on generation location is given in Table 3.14 and Table 3.15, which show amongst other things, the disposition on the basis of SYS Study Zone and plant type for the years 2008/09 and 2014/15 respectively.

Finally, to provide a more complete picture, Table 3.16 lists generation projects for which the appropriate bilateral agreement is in place but which are scheduled to commission beyond the scope of this GB SYS (i.e. after 2014/15)

Generation Terminology

Generation Capacity

There are a several terms within the Electricity Supply Industry of Great Britain, which are currently used to describe the generation capacity of Power Stations and/or Generating Units. Arguably, the most common of these are:

Declared Net Capability (DNC);
Registered Capacity (RC);
Transmission Entry Capacity (TEC); and
Connection Entry Capacity (CEC).

Each of the above terms carries a different meaning; some differences are slight whilst others are significant. Definitions or ‘descriptions’ of these terms are included in the Glossary to this Statement. As a consequence of their different meanings, some are more appropriate for certain uses than others. The following paragraphs provide an outline description of each and summarise how each has been used for the purposes of this Statement.

Declared Net Capability (DNC)

The term DNC is essentially a pre-vesting term. It is no longer used by NGET but, until 2004, was still used by the two Scottish Transmission Licensees (i.e. SPT and SHETL) in their Seven Year Statements. It may be noted that the definition given in the Glossary, which mirrors the definition given in the 2004 SPT SYS, does not define "Generator", although this can be taken to mean either a generating unit or a power station. Nor does that definition define "Auxiliary load" or "site demand", although these may be taken to carry the same meaning

The term DNC is often used to describe the level of electricity sourced from renewable fuels, since the term takes the intermittent nature of the power output from some renewable sources into account. For wind this is 43% of its gross capacity.

Finally, whilst reference may be made to DNC in parts of this Statement, the term is not otherwise used.

Registered Capacity (RC)

The term RC was introduced at vesting and has been in use in England and Wales since then. Its definition has developed over the years and is given in various documents, the most notable of which are the Grid Code (GC) and the Licence Standard. The value of the term has been used in the setting of regulatory, licence and Grid Code requirements. For example, the size of Power Station in terms of RC classifies the station as Small, Medium or Large. That classification, in turn, determines whether the particular plant requires a licence and/or which parts of the Grid Code must be complied with. The current definition is given in the Glossary.

Whilst the definition of RC has been developed over the years since vesting, it is nevertheless very similar in effect to the less rigorous pre-vesting term and definition of DNC used by the Scottish Transmission Licensees. The terms and values of DNC and RC have all been used by the various parties over the years in:

- the application of the Licence Standard, transmission infrastructure planning and transmission connection planning;
- defining the size of a Power Station for regulatory, GC compliance and other purposes (e.g. Large, Medium and Small Power Stations);
- evaluating Plant Margins; and
- charging purposes (e.g. setting Transmission Network Use of System charges).

The following provides a quick reference summary of the key properties of RC and its usage within this Statement:

- RC and CEC are both on a unit basis and are broadly synonymous
- The License Standard is currently written in terms of Registered Capacity
- " In cases where a unit value of generation capacity is required, and given that there is no unit value for TEC, RC may be judiciously used. An example would be when compiling a Ranking Order. However, even in this case, the maximum output of each Power Station should not exceed the TEC. That methodology, which is described Modelling of the Planned Transfer, requires inputs relating to both RC and TEC. The Ranking Order is a basis for system analyses.

Transmission Entry Capacity (TEC)

The relatively new terms of TEC and CEC were first introduced under the ‘New Electricity Trading arrangements’ (NETA), which were applied in England and Wales. The terms continue to be used under the ‘British Electricity Trading and Transmission Arrangements’ (BETTA), which were introduced in 2005 to replace NETA and are applied to the whole of the GB transmission system. In essence, TEC reflects the maximum power the user can export across the GB transmission system away from the connection site. TEC is defined on a station basis only and cannot exceed station CEC. In the GB Grid Code, TEC is defined by reference to the meaning set out in the Connection and Use of System Agreement. This avoids the need to amend the GC when the value of TEC is changed for whatever reason. The Glossary includes an informal description of TEC, which has been written for the purpose of this Statement. The Glossary description is not intended as a formal definition and equivalent descriptions and definitions in other documentation may differ slightly.

Inspection of the description of TEC included in the Glossary section of this Statement reveals that it differs from the Grid Code definition of RC in two respects. First, TEC is solely on a Power Station basis and does not exist on a Generating Unit or CCGT Module basis. Second, the value of TEC represents the net "spill" onto the GB transmission system from the Power Station. Accordingly, any auxiliary demand supplied through the station transformers is netted off the gross station output to give the net "spill".

TEC cannot be greater than Power Station CEC but can be lower since: first, TEC is net of any auxiliary demand supplied through the station transformers; and second, the actual value of TEC can be set for commercial reasons at any lower level. TEC is a commercial term and its value is given in the relevant bilateral agreement.

The following provides a quick reference summary of the key properties of TEC and its usage within this Statement:

- TEC reflects the maximum power the Generator can export across the system from the Grid Entry Point or User System Entry Point.
- The level of use of system rights for a power station is expressed in terms of the amount of TEC that has been purchased by the Generator for that power station.
- Transmission infrastructure is designed on the basis of TEC.
- It may be noted that RC rather than TEC is currently used in the GB Transmission System Security and Quality of Supply Standard (License Standard). However, given the similarity between the definitions as discussed above, there is no difference in effect, providing that caution is exercised in relation to the appropriate system demand used. That is, if TEC is used in place of RC then the auxiliary demand supplied through the station transformers should be netted off the "GB Transmission System Demand".
- TEC is the main generation capacity term/value used in this 2007 GB SYS.
- The value of TEC is used for power system analyses and plant margin calculation etc.

<u>Connection Entry Capacity (CEC)</u>

As previously mentioned, the term CEC was first introduced, along with the term TEC, under NETA. In essence, CEC is used on both a Generating Unit and Power Station basis. CEC may be regarded as the maximum power that a user may export onto the GB transmission system at the connection site. As with TEC, the GC defines CEC by reference to the meaning set out in the Connection and Use of System Agreement. As previously explained, this avoids the need to amend the GC when the value of CEC is changed for whatever reason. The Glossary includes an informal description of CEC, which has been written for the purpose of this Statement. As with the Glossary description of TEC, the Glossary description of CEC is not intended as a formal definition and equivalent descriptions and definitions in other documentation may differ slightly.

The Glossary description of CEC is in three parts. For each part, i.e. (a) in relation to a Generating Unit, (b) in relation to a CCGT Module and (c) in relation to a Power Station, the relevant value of CEC is written into the bilateral connection agreement.

In the case of (a), the Generating Unit CEC is used as a basis for the design of a new or modified connection. In the case of (c), the Power Station CEC is normally the sum of the individual Generating Unit CECs. A Generator may choose to declare a Power Station CEC, which is lower (but not higher) than the summation of individual Generating Unit CECs, in which case this lower value is written into the bilateral connection agreement.

Inspection of the Glossary description of CEC reveals that it is almost identical to the GC definition of RC and the two may be regarded as being broadly synonymous. The only difference lies in the fact that, on the one hand CEC may include "Maxgen" capability or alternatively it may include a restricted output due to a technical difficulty. RC, on the other hand, is written in terms of "normal full load Capacity". CEC may be regarded as setting the ceiling value on RC.

As mentioned previously, TEC cannot be greater than power station CEC but can be lower.

The following provides a quick reference summary of the key properties of CEC and its usage within this Statement:

- CEC reflects the maximum power for which the Grid Entry Point or User System entry Point should be designed.
- CEC values have been used in the allocation of connection assets in the charge setting process but with the introduction of "PLUGS" this practise ceases. "PLUGS" is the charging methodology, which was introduced in England & Wales on 1 April 2004 and in Scotland on 30 November 2004.
- The Grid Entry Point is designed on the basis of CEC
- It may be stressed that RC rather than CEC is currently used in the License Standard. However, given the similarity between definitions, there is no difference in effect.
- CEC is referred to and displayed in the various tables of this Statement where appropriate. However, CEC is not be used in the power system analyses.

Finally, as a related point of interest, PC.4.3.1 of the Grid Code states that, "...NGET will also use the Transmission Entry Capacity and Connection Entry Capacity in the preparation of the Seven Year Statement and to that extent the data will not be treated as confidential".

Large, Medium and Small Power Stations

The GB Grid Code places different requirements on different classes of generating plant. The three main power station classifications are Large Power Station, Medium Power Station and Small Power Station and the Grid Code defines these on the basis of Registered Capacity. The relevant definitions are included in the Glossary section of this Statement. Inspection reveals that the definitions vary according to whether the power station is located on the NGET system, on the SPT system or on the SHETL system. Table 3.1 summarises the differences.

Notwithstanding the fact that the GB Grid Code classifies power stations in terms of their Registered Capacity, for the intents and purposes of this Statement, Power Stations may be taken to be classified and defined in terms of power station Transmission Entry Capacity (TEC).

Bilateral Agreements

The definition included in the Glossary of this Statement identifies three types of Bilateral Connection Agreement, namely a Bilateral Connection Agreement (BCA); a Bilateral Embedded Generation Agreement (BEGA); and a Bilateral Embedded Licence Exemptable Large Power Station Agreement (BELLA). Power station projects where these agreements are in place are, as explained in the Glossary, defined as “Transmission Contracted”.

Please note, however, that whether “Transmission Contracted” or not, the Distribution Network Operator nets off what he deems an appropriate allowance for the output from embedded Medium and Small power stations from his week 24 Grid Code demand submissions. Accordingly, such power stations are not detailed in this chapter.

Figure 10.5 of Chapter 10 describes the relationships between the different types of Bilateral Agreement, the power station type, the connection type, the power station output terminology and the appropriate charges.

Bilateral Connection Agreement (BCA)

A BCA is for directly connected power stations (regardless of whether they are classified as Large, Medium or Small), directly connected Distribution Systems, Non-Embedded Customers and directly connected Interconnectors.

A User with a BCA pays for both connection to the GB transmission system and for use of the GB transmission system.

A power station covered by a BCA will have both TEC and CEC values.

Bilateral Embedded Generation Agreement (BEGA)

A BEGA, amongst other things, relates to use of the GB transmission system by embedded power stations (which are not License exempt), small power station trading parties and distribution interconnector owners. An embedded power station covered by a BELLA (see below) is not included, as a BELLA relates to Licence exempt embedded Large power stations.

A User with a BEGA does not have a connection to the GB transmission system and, in consequence, does not pay connection charges relating to the GB transmission system. The User does however use the GB transmission system and therefore pays appropriate use of system charges.

A power station covered by a BEGA does not have a CEC since the term CEC relates to the connection assets to the GB transmission system of which there are none. However, a BEGA power station does have a TEC for the purpose of use of the GB transmission system.

Bilateral Embedded Licence Exemptable Large Power Station Agreement(BELLA)

A BELLA is for embedded Large power stations, which are Licence exempt and which are registered either in the SMRS (Supply Metering Registration System) or in the CMRS (Central Metering Registration System) by a User (e.g. host User) who is responsible for the transmission use of system charges relating to the GB transmission system associated with the Balancing Mechanism (BM) Unit registered in CMRS..

A power station covered by a BELLA does not have a connection to the GB transmission system and in consequence does not pay connection charges relating to the GB transmission system. Nor does the power station 'directly' use the GB transmission system since this is via the User referred to above who is responsible for transmission use of system charges associated with the CMRS registered BM Unit. Accordingly a BELLA power station does not pay GB transmission use of system charges. However, payments may change hands between the power station and the User in relation to reduced demand, use of the distribution system etc.

A power station covered by a BELLA has neither a TEC nor a CEC. The output of the power station is described in Appendix A of the BELLA by the term 'Size of Power Station'.

Licence Exempt Generation Agreement (LEGA)

There used to be a fourth type of Bilateral Agreement, namely: a LEGA. While the LEGA was phased out in 2006, it is mentioned here for completeness. The LEGA was for power stations capable of exporting between 50MW and 100MW to the total system (i.e. embedded Medium power stations in England and Wales) connecting since 30 September 2000. Such generators could apply to the DTI to seek Licence Exemption. The DTI would then consult all interested parties including National Grid. On receipt of the DTI consultation documents we would consider the need for:

- any transmission system works including timing;
- Grid Code data requirements (e.g. Planning Code data);
- technical requirements (e.g. as specified under the Grid Code Connection Conditions);
- metering requirements

The above information would then be included in our response to the DTI consultation document and at the same time we would offer a Licence Exempt Generation Agreement with the Generator, also containing the above information, where appropriate. The Bilateral Agreements did not automatically subject the Generator to TNUoS charges, but would provide for any necessary data exchange.

A LEGA was, by definition, a Medium power station. In submitting the Week 24 Grid Code demand submissions, the Distribution Network Operator would, as with other embedded Medium power stations, net off his allowance for the output of a LEGA.

Licence exempt embedded Large (rather than Medium) power stations were, and continue to be, covered by a BELLA (rather than a LEGA).

Transmission System Access

Access to the GB transmission system is provided through arrangements with National Grid, acting as GBSO, under the Connection and Use of System Code (CUSC). The CUSC sets out the contractual framework for connection to, and use of, the GB transmission system. The CUSC has applied across the whole of Great Britain since BETTA "go-live" (1 April 2005).

All applications for connection to, or use of, the GB transmission system are routed through National Grid as GBSO. On receipt of an application for connection to, or use of, the NGET system in England and Wales, NGET prepare a Transmission Owner Reinforcement Instruction (TORI) and elements of this are used by NGET in making an appropriate Offer to the customer. On receipt of an application to connect to, or use, one of the networks owned by a Scottish Transmission Owner (i.e. SHETL or SPT), NGET copy the application to the relevant TO who prepares a Transmission Owner Construction Agreement (TOCA). NGET then make an appropriate Offer to the customer on the basis of both the TORI and TOCA. Amongst other things, the TOCA would include, transmission works, User works, dates and construction programme. A TOCA is only relevant for connections to the Scottish networks. When the Offer is agreed and signed, the project becomes ‘Transmission Contracted’ and the relevant Scottish TO proceeds with construction in accordance with the TOCA.

As previously explained, in recognition of the uncertainties associated with the future, unless otherwise stated the information presented in this chapter is restricted to existing generation projects and those proposed new generation projects, which are deemed most likely to proceed to completion. Accordingly, unless otherwise stated only those proposed future projects, which are classified as "transmission contracted", are included.

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Table 3.1 - Power Station Classification by Registered Capacity (MW)

Class	NGET	SPT	SHETL
Large	100 or more	30 or more	10 or more
Medium	50 or more but less than 100	Unclasified	Unclasified
Small	Less than 50	Less than 30	Less than 10

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Table 3.2 - Section 36 Consent: Recent Decisions on Applications

Authority	Licensee	Station Name	Owner	Plant Type	S36 Capacity (MW)	S36 Status	S36 Date	S14 Status	S14 Date
BWEA	NGET	Greater Gabbard	Airtricity	Windfarm	500	Granted	01/02/2007	Not Required	
BWEA	NGET	Gunfleet Sands (september) TWA	DONG Energy	Windfarm	108	Granted	01/10/2003	Not Required	
BWEA	NGET	London Array	E.ON UK Renewables	Windfarm	1000	Granted	01/12/2006	Not Required	
BWEA	NGET	Ormonde	Eclipse Energy	Windfarm	108	Granted	01/02/2007	Not Required	
BWEA	NGET	Thanet	Warwick Energy	Windfarm	300	Granted	01/12/2006	Not Required	
BWEA	SHETL	An Suidhe	npower renewables	Windfarm	30	Granted	01/03/2003	Not Required	
BWEA	SHETL	Ark Hill	RES	Windfarm	10.4	Granted	01/06/2006	Not Required	
BWEA	SHETL	Beinn an Tuirc Extension	Scottish Power	Windfarm	38	Granted	01/12/2005	Not Required	
BWEA	SHETL	Causeymire Extension	npower renewables	Windfarm	6.7	Granted	01/11/2005	Not Required	
BWEA	SHETL	Drummuir	RES	Windfarm	48	Granted	01/01/2005	Not Required	

BWEA	SHETL	Lochelbank	npower renewables	Windfarm	15.6	Granted	01/08/2007	Not Required	
BWEA	SHETL	Novar Extension	npower renewables	Windfarm	32	Granted	01/06/2005	Not Required	
BWEA	SHETL	Paul's Hill extension	Fred Olsen Renewables	Windfarm	9.2	Granted	01/01/2006	Not Required	
BWEA	SHETL	Rosehall Woods	E.ON UK Renewables	Windfarm	24.7	Granted	01/09/2006	Not Required	
BWEA	SHETL	Tullo	WCE	Windfarm	12	Granted	01/06/2005	Not Required	
BWEA	SPT	Aikengall	Community Windpower	Windfarm	39	Granted	01/03/2007	Not Required	
BWEA	SPT	Crystal Rig extension	Fred Olsen Renewables	Windfarm	164	Granted	01/07/2005	Not Required	
BWEA	SPT	Dun Law extension	RES	Windfarm	29.75	Granted	01/01/2006	Not Required	
BWEA	SPT	Long Park	Wind Prospect	Windfarm	45	Granted	01/07/2006	Not Required	
BWEA	SPT	Minsca Farm	Airtricity	Windfarm	39	Granted	01/06/2005	Not Required	
BWEA	SPT	Toddleburn	Scottish & Southern	Windfarm	36	Granted	01/01/2007	Not Required	
BWEA	SPT	Tormywheel	Your Energy & PM Renewables	Windfarm	30	Granted	01/06/2007	Not Required	
BWEA	SPT	Whiteside Hill	Airtricity	Windfarm	25.3	Granted	01/08/2007	Not Required	
BWEA	SPT	Windy Standard Extension	npower renewables	Windfarm	90	Granted	01/03/2007	Not Required	
DTI	NGET	Conoco Refinery, South Killingholme	Immingham CHP	GT CHP	1230	Granted	31/10/2006	Granted	
DTI	NGET	Grain	E.ON UK Ltd	CCGT-CHP	1200	Granted	31/10/2006	Granted	
DTI	NGET	Heysham Offshore Windfarm	Heysham Offshore Wind Ltd	Offshore Wind		Granted		Not Required	
DTI	NGET	Langage, Plymouth	Wainstones Power Ltd	CCGT	1010	Granted	15/11/2000	Granted	22/11/2000
DTI	NGET	Marchwood Power Station, Hampshire	ESBi	CCGT/ OCGT	860	Granted	28/11/2002	Granted	29/11/2002
DTI	NGET	New Severn Power Station, Uskmouth	Severn Power Ltd	CCGT	800	Granted	17/08/2007	Granted	17/05/2007

DTI	NGET	New West Burton Power Station	E.ON UK	CCGT	1270	Granted	30/10/2007	Granted	30/10/2007
Scottish Executive	SHETL	Abercairney Windfarm	Catamount Energy Ltd c/o Force 9 Energy	Windfarm	66	Refused	08/09/2006	Not Required	
Scottish Executive	SHETL	Braes of Doune Windfarm	Airtricity Developments Ltd	Windfarm	100	Granted	05/10/2004	Not Required	
Scottish Executive	SHETL	Cairn Uish Windfarm	Natural Power Consultants Ltd	Windfarm	56	Granted	28/04/2004	Not Required	
Scottish Executive	SHETL	Calliacher Windfarm	I&H Brown Ltd	Windfarm	62.1	Refused	10/09/2007	Not Required	
Scottish Executive	SHETL	Causeymire Windfarm	National Wind Power and Innes Miller	Windfarm	55.2	Granted	17/11/2005	Not Required	
Scottish Executive	SHETL	Clashindarroch Windfarm	AMEC Wind	Windfarm	129	Refused	10/09/2007	Not Required	
Scottish Executive	SHETL	Farr Windfarm	Npower Renewables	Windfarm	112.5	Granted	05/10/2004	Not Required	
Scottish Executive	SHETL	Fasnakyle Hydro Extension	SSE Generation Ltd	Hydro	7.5	Granted	30/03/2004	Not Required	
Scottish Executive	SHETL	Glendoe Hydro	SSE Generation Ltd	Hydro	100	Granted	28/07/2005	Not Required	
Scottish Executive	SHETL	Paul's Hill Windfarm	Natural Power Consultants Ltd	Windfarm	56	Granted	31/03/2003	Not Required	
Scottish Executive	SHETL	Paul's Hill Windfarm Extension	Natural Power Consultants Ltd	Windfarm	9	Granted	31/12/2005	Not Required	
Scottish Executive	SPT	Black Law Windfarm	Scottish Power	Windfarm	142.6	Granted	13/02/2004	Not Required	
Scottish Executive	SPT	Crystal Rig 2	Natural Power Consultants Ltd	Windfarm	90	Granted	12/07/2005	Not Required	
Scottish Executive	SPT	Crystal Rig Windfarm Extension	Natural Power Consultants Ltd	Windfarm	62.5	Granted	25/05/2004	Not Required	
Scottish Executive	SPT	Greenock	Greenock Windfarm (Scotland) Ltd	Windfarm	55	Refused	23/07/2007	Not Required	
Scottish Executive	SPT	Hadyard Hill Windfarm	SSE Generation Ltd	Windfarm	130	Granted	24/12/2003	Not Required	
Scottish Executive	SPT	Harestanes	CRE Energy	Windfarm	213	Granted	10/09/2007	Not Required	

Scottish Executive	SPT	Whitelee Windfarm	Scottish Power	Windfarm	322	Granted	27/04/2006	Not Required	

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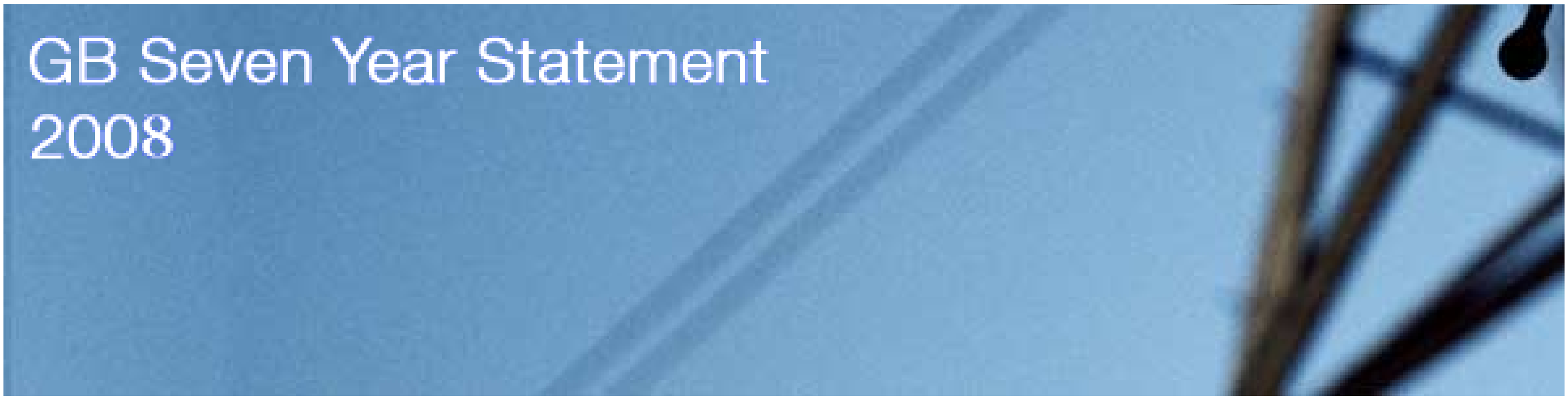

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Table 3.3 - Section 36 Consent: Submitted Applications

Authority	Station Name	Licensee	Owner	Plant Type	S36 Capacity (MW)	S36 Status	S36 Date	S14 Status	S14 Date
Scottish Executive	Afton Windfarm	SPT	E.ON UK	Windfarm	74.25	Applied	03/11/2004	Not Required	
Scottish Executive	Arecleoch Windfarm	SPT	Scottish Power	Windfarm	180	Applied	27/03/2006	Not Required	
Scottish Executive	Aultmore Windfarm	SHETL	AMEC Wind	Windfarm	62	Applied	27/10/2003	Not Required	
Scottish Executive	Baillie Windfarm	SHETL	Dudley Developments	Windfarm	75	Applied	12/07/2004	Not Required	
Scottish Executive	Berry Burn Windfarm	SHETL	Force 9 Energy	Windfarm	78.3	Applied	19/09/2004	Not Required	
Scottish Executive	Blackcraig Hill Windfarm	SPT	SSE Generation Ltd	Windfarm	69	Applied	30/09/2005	Not Required	
Scottish Executive	Carraig Gheal Windfarm	SHETL	Green Power (Carraig Gheal Ltd)	Windfarm	75	Applied	15/11/2004	Not Required	
Scottish Executive	Clyde Windfarm	SPT	Airtricity Developments Ltd	Windfarm	622.8	Applied	03/11/2004	Not Required	
Scottish Executive	Dersalloch Windfarm	SPT	CRE Energy Ltd	Windfarm	78	Applied	29/07/2005	Not Required	

Scottish Executive	Dunbeath Windfarm	SHETL	West Coast Energy	Windfarm	51	Applied	12/08/2005	Not Required	
Scottish Executive	Dunmaglass Windfarm	SHETL	RES Group	Windfarm	100	Applied	11/02/2005	Not Required	
Scottish Executive	Ewehill Windfarm	SPT	Scottish Power	Windfarm	92	Applied	31/03/2004	Not Required	
Scottish Executive	Fallago Ridge Windfarm	SPT	North British Wind Energy	Windfarm	114	Applied	16/05/2005	Not Required	
Scottish Executive	Gordonbush Windfarm	SHETL	SSE Generation Ltd	Windfarm	87.5	Applied	18/06/2003	Not Required	
Scottish Executive	Griffin Windfarm	SHETL	Greenpower (Griffin) Limited	Windfarm	216	Applied	27/04/2004	Not Required	
Scottish Executive	Harrows Law Windfarm	SPT	Scottish & Southern Energy plc	Windfarm	150	Applied	24/06/2005	Not Required	
Scottish Executive	Kyle Windfarm	SPT	AMEC Wind	Windfarm	300	Applied	29/10/2004	Not Required	
Scottish Executive	Limmer Hill Windfarm	SPT	West Coast Energy Ltd	Windfarm	99	Applied	04/08/2005	Not Required	
Scottish Executive	Lochluichart Windfarm	SHETL	LZN Ltd	Windfarm	129	Applied	11/11/2005	Not Required	
Scottish Executive	Mark Hill Windfarm	SPT	Force 9 Energy Ltd	Windfarm	84	Applied	19/08/2005	Not Required	
DTI	New Drakelow, South Derbyshire	NGET	E.ON UK plc	CCGT	1220	Applied	06/09/2005		
DTI	New Pembroke Power Station	NGET	RWE npower	CCGT	2000	Applied	06/01/2005		
DTI	New Sutton Bridge	NGET	EDF Energy	CCGT	1260	Applied	23/12/2005		
DTI	Port Talbot Renewable Energy Plant	NGET	Prenergy Ltd	Bio-mass	350	Applied	06/10/2006		
Scottish Executive	Shira	SHETL	Natural Power	Windfarm	79	Applied	14/03/2006	Not Required	
DTI	Thor Cogeneration Power Station, Seal Sands, Teeside	NGET	Thor Cogeneration Ltd	CCGT	1020	Applied	19/01/2007		

Scottish Executive	Waterhead Moor Windfarm	SPT	Scottish & Southern Energy plc	Windfarm	132	Applied	08/11/2004	Not Required	

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Table 3.4 - Generation Commissioning Date Assumptions

Station Name	Licensee	Commissioning Year	Plant Type	TEC (MW)	Contract Date	S36 Status	S36 Date	S14 Status	S14 Date
none									

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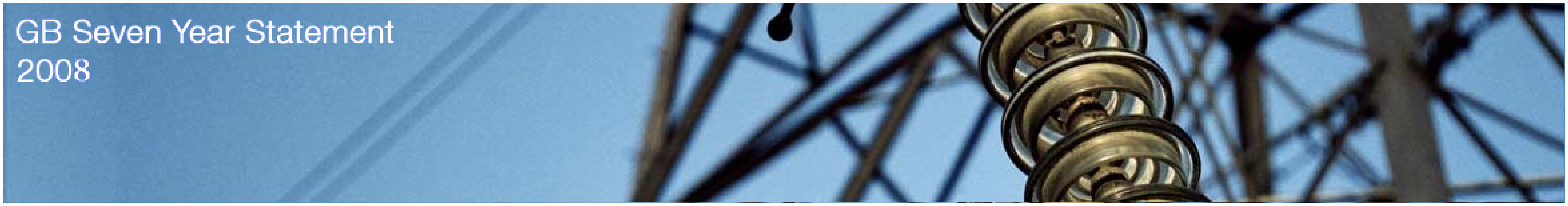

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Table 3.5 - Power Station Transmission Entry Capacities for 2008/09 to 2014/15 (MW)

Licensee	Plant Type	Power Station	Owner	2008/09 Capacity (MW)	2009/10 Capacity (MW)	2010/11 Capacity (MW)	2011/12 Capacity (MW)	2012/13 Capacity (MW)	2013/14 Capacity (MW)	2014/15 Capacity (MW)	SYS Study Zone	TEC	Size of Power Station	CEC	Tariff Zone	Type of Bilateral Agreement	DCLF Node
NGET	Biomass	Port Talbot	Prenergy Power Ltd	0	0	0	350	350	350	350	Z13	Yes		350	15	BCA	MAGA20
NGET	CCGT	Abernedd Stage 1	BP Alternative Energy International Ltd							435	Z13	Yes		435	15	BCA	
NGET	CCGT	Amlwch	Canatxx Energy Ventures Ltd	0	0	0	0	270	270	270	Z9	Yes		299	11	BCA	AMLW40
NGET	CCGT	Baglan Bay	Baglan Generating Ltd & Baglan Operations Ltd	552	552	552	552	552	552	552	Z13	Yes		552	15	BCA	BAGB20
NGET	CCGT	Barking	Barking Power Ltd	1000	1000	1000	1000	1000	1000	1000	Z14	Yes		1000	17	BCA	BARK20_LPN
NGET	CCGT	Barry	Centrica Barry Ltd	245	245	245	245	245	245	245	Z13	Yes			15	BEGA	CARE20
NGET	CCGT	Brigg	Regional Power Generators Ltd	268	268	268	268	268	268	268	Z8	Yes			13	BEGA	KEAD40
NGET	CCGT	Brine Field	Thor Cogeneration Ltd	0	0	0	1020	1020	1020	1020	Z7	Yes		1020	10	BCA	
NGET	CCGT	CDCL	E.ON UK plc	395	395	395	395	395	395	395	Z10	Yes		440	13	BCA	COTT40
NGET	CCGT	Connahs Quay	E.ON UK plc	1380	1380	1380	1380	1380	1380	1380	Z9	Yes		1500	13	BCA	DEES40
NGET	CCGT	Corby	Corby Power Ltd	401	401	401	401	401	401	401	Z12	Yes			14	BEGA	GREN40_EME
NGET	CCGT	Coryton	Coryton Energy Company Ltd	800	800	800	800	800	800	800	Z15	Yes		800	17	BCA	COSO40

NGET	CCGT	Damhead Creek	ScottishPower Generation Ltd	805	805	805	805	805	805	805	Z15	Yes		805	17	BCA	KINO40
NGET	CCGT	Deeside	Deeside Power Ltd	495	495	495	495	495	495	495	Z9	Yes		500	13	BCA	DEES40
NGET	CCGT	Didcot B	RWE Npower plc	1500	1550	1550	1550	1550	1550	1550	Z13	Yes		1500	18	BCA	DIDC40
NGET	CCGT	Drakelow D	E.ON UK plc	0	1230	1230	1230	1230	1230	1230	Z11	Yes		1230	14	BCA	DRAK40
NGET	CCGT	Enfield	E.ON UK plc	408	408	408	408	408	408	408	Z14	Yes		408	17	BEGA	BRIM2A_LPN / BRIM2B_LPN / BRIM2C_LPN / BRIM2D_LPN
NGET	CCGT	Grain Stage 1	E.ON UK plc	0	0	860	860	860	860	860	Z15	Yes		860	17	BCA	GRAI40
NGET	CCGT	Grain Stage 2	E.ON UK plc	0	0	0	430	430	430	430	Z15	Yes		430	17	BCA	GRAI40
NGET	CCGT	Great Yarmouth	Great Yarmouth Power Ltd	420	420	420	420	420	420	420	Z12	Yes			14	BEGA	NORW40
NGET	CCGT	Keadby	Keadby Generation Ltd	735	735	735	735	735	735	735	Z8	Yes		794	13	BCA	KEAD40
NGET	CCGT	Killingholme 1	E.ON UK plc	900	900	900	900	900	900	900	Z8	Yes		1000	9	BCA	KILL40
NGET	CCGT	Killingholme 2	Centrica Generation Ltd	665	665	665	665	665	665	665	Z8	Yes		680	9	BCA	KILL40
NGET	CCGT	Kings Lynn	Centrica KL Ltd	340	340	340	340	340	340	340	Z12	Yes			13	BEGA	WALP40_EME
NGET	CCGT	Langage	Centrica Langage Ltd	905	905	905	905	905	905	905	Z17	Yes		850	20	BCA	LANG40
NGET	CCGT	Langage Stage 2	Centrica Langage Ltd	0	0	0	0	0	0	0	Z17	Yes		400	20	BCA	LANG40
NGET	CCGT	Little Barford A	RWE Npower plc	665	665	665	665	665	665	665	Z12	Yes		750	14	BCA	EASO40
NGET	CCGT	Little Barford B	RWE Npower plc	0	0	0	0	475	475	475	Z12	Yes		525	14	BCA	EASO40
NGET	CCGT	Marchwood	Marchwood Power Ltd	900	900	900	900	900	900	900	Z16	Yes		920	19	BCA	MAWO40
NGET	CCGT	Medway	Medway Power Ltd	700	700	700	700	700	700	700	Z15	Yes		700	17	BCA	GRAI40
NGET	CCGT	Pembroke 1 Stage 1	RWE Npower plc	0	800	800	800	800	800	800	Z13	Yes		840	15	BCA	PEMB40
NGET	CCGT	Pembroke 1 Stage 2	RWE Npower plc	0	1200	1200	1200	1200	1200	1200	Z13	Yes		2060	15	BCA	PEMB40
NGET	CCGT	Pembroke 2 Stage 1	Milford Power UK Ltd	0	0	0	0	0	1200	1200	Z13	Yes		410	15	BCA	PEMB40
NGET	CCGT	Pembroke 2 Stage 2	Milford Power UK Ltd	0	0	0	0	0	0	800	Z13	Yes		2040	15	BCA	PEMB40
NGET	CCGT	Peterborough	Centrica PB Ltd	405	405	405	405	405	405	405	Z12	Yes			13	BEGA	WALP40_EME
NGET	CCGT	Rocksavage	Rocksavage Power Company Ltd	748	748	748	748	748	748	748	Z9	Yes		775	13	BCA	ROCK40
NGET	CCGT	Roosecote	Centrica RPS Ltd	229	229	229	229	229	229	229	Z9	Yes			9	BEGA	HUTT40
NGET	CCGT	Rye House	ScottishPower Generation Ltd	715	715	715	715	715	715	715	Z14	Yes		715	17	BCA	RYEH40
NGET	CCGT	Saltend	Saltend Cogeneration Company Ltd	1100	1100	1100	1100	1100	1100	1100	Z8	Yes		1200	9	BCA	SAES20
NGET	CCGT	Seabank 1	Seabank Power Ltd	820	820	820	820	820	820	820	Z13	Yes		1320	15	BCA	SEAB40

NGET	CCGT	Seabank 2	Seabank Power Ltd	414	414	414	414	414	414	414	Z13	Yes			15	BCA	SEAB40
NGET	CCGT	Severn Power Stage 1	Severn Power Ltd	0	425	425	425	425	425	425	Z13	Yes		850	15	BCA	USKM2B
NGET	CCGT	Severn Power Stage 2	Severn Power Ltd	0	0	425	425	425	425	425	Z13	Yes		850	15	BCA	USKM2B
NGET	CCGT	Shoreham	ScottishPower (SCPL) Ltd	420	420	420	420	420	420	420	Z16	Yes			18	BEGA	BOLN40
NGET	CCGT	South Humber Bank 1	Humber Power Ltd	769	769	769	769	769	769	769	Z8	Yes		1312	9	BCA	SHBA40
NGET	CCGT	South Humber Bank 2	Humber Power Ltd	516	516	516	516	516	516	516	Z8	Yes			9	BCA	SHBA40
NGET	CCGT	Spalding	Spalding Energy Company Ltd	880	880	880	880	880	880	880	Z10	Yes		903	13	BCA	SPLN40
NGET	CCGT	Staythorpe C Stage 1	RWE Npower plc	0	425	425	425	425	425	425	Z10	Yes		445	13	BCA	STAY40
NGET	CCGT	Staythorpe C Stage 2	RWE Npower plc	0	425	425	425	425	425	425	Z10	Yes		890	13	BCA	STAY40
NGET	CCGT	Staythorpe C Stage 3	RWE Npower plc	0	850	850	850	850	850	850	Z10	Yes		1780	13	BCA	STAY40
NGET	CCGT	Sutton Bridge A	EDF Energy (Sutton Bridge Power)	800	800	800	800	800	800	800	Z12	Yes		803	13	BCA	WALP40_EME
NGET	CCGT	Sutton Bridge B	West Burton Limited	0	0	0	0	0	1305	1305	Z12	Yes		1305	13	BCA	WALP40_EME
NGET	CCGT	Teesside	Teesside Power Ltd	1875	1875	1875	1875	1875	1875	1875	Z7	Yes		1875	10	BCA	GRST20
NGET	CCGT	West Burton B Stage 1	West Burton Limited	0	435	435	435	435	435	435	Z10	Yes		1305	13	BCA	WBUR40
NGET	CCGT	West Burton B Stage 2	West Burton Limited	0	0	435	435	435	435	435	Z10	Yes			13	BCA	WBUR40
NGET	CCGT	West Burton B Stage 3	West Burton Limited	0	0	435	435	435	435	435	Z10	Yes			13	BCA	WBUR40
NGET	CCGT	Wilton	Sembcorp Utilities	50	50	50	50	50	50	50	Z7	Yes		175.59999999999999	10	BCA	GRST20
NGET	CHP	Derwent	Derwent Cogeneration Ltd	228	228	228	228	228	228	228	Z11	Yes			14	BEGA	WILE20
NGET	CHP	Fawley CHP	Npower Cogen Trading Ltd	158	158	158	158	158	158	158	Z16	Yes			19	BEGA	FAWL40
NGET	CHP	Immingham Stage 1	Immingham CHP LLP	719	719	719	719	719	719	719	Z8	Yes		760	9	BCA	HUMR40
NGET	CHP	Immingham Stage 2	Immingham CHP LLP	601	601	601	601	601	601	601	Z8	Yes		560	9	BCA	HUMR40
NGET	CHP	Sellafield	Fellside Heat & Power Ltd	155	155	155	155	155	155	155	Z9	Yes			9	BEGA	HUTT40
NGET	CHP	Shotton	Gaz de France Marketing Ltd	210	210	210	210	210	210	210	Z9	Yes			13	BEGA	DEES40
NGET	ICGCCT	Teesport	Coastal Energy Ltd							925	Z7	Yes		950	10	BCA	
NGET	IGCC with CCS	Blyth	RWE Npower plc	0	0	0	0	0	0	1600	Z7	Yes		1600	10	BCA	
NGET	IGCC with CCS	Hatfield	Powerfuel plc	0	0	0	800	800	800	800	Z8	Yes		800	13	BCA	

NGET	Interconnector	East-West Interconnector Project	EirGrid plc				500	500	500	500	Z9	Yes		500	9	BCA	
NGET	Interconnector	French Interconnector	NG Interconnectors Ltd	1988	1988	1988	1988	1988	1988	1988	Z15	Yes		2000	17	BCA	SELL40
NGET	Interconnector	Netherlands Interconnector Stage 1	BritNed Development Ltd	0	0	0	0	0	0	0	Z15	Yes		0	17	BCA	GRAI40
NGET	Interconnector	Netherlands Interconnector Stage 2	BritNed Development Ltd	0	0	800	800	800	800	800	Z15	Yes		800	17	BCA	GRAI40
NGET	Interconnector	Netherlands Interconnector Stage 3	BritNed Development Ltd	0	0	520	520	520	520	520	Z15	Yes		520	17	BCA	GRAI40
NGET	Large Unit Coal	Didcot A	RWE Npower plc	2109	2109	2109	2109	2109	2109	2109	Z13	Yes		2084	18	BCA	DIDC40
NGET	Large Unit Coal + AGT	Aberthaw	RWE Npower plc	1692	1692	1692	1692	1692	1692	1692	Z13	Yes		1557	15	BCA	ABTH20
NGET	Large Unit Coal + AGT	Cottam	EDF Energy (Cottam Power) Ltd	2000	2000	2000	2000	2000	2000	2000	Z10	Yes		2008	13	BCA	COTT40
NGET	Large Unit Coal + AGT	Drax	Drax Power Ltd	3906	3906	3906	3906	3906	3906	3906	Z8	Yes		3945	9	BCA	DRAX40
NGET	Large Unit Coal + AGT	Eggborough	Eggborough Power Ltd	1940	1940	1940	1940	1940	1940	1940	Z8	Yes		2136	9	BCA	EGGB40
NGET	Large Unit Coal + AGT	Ferrybridge	Keadby Generation Ltd	1981	1981	1981	1981	1981	1981	1981	Z8	Yes		1989	9	BCA	FERR20_YED
NGET	Large Unit Coal + AGT	Fiddlers Ferry	Keadby Generation Ltd	1987	1987	1987	1987	1987	1987	1987	Z9	Yes		1995	9	BCA	FIDF20
NGET	Large Unit Coal + AGT	Ironbridge	E.ON UK plc	964	964	964	964	964	964	964	Z11	Yes		1034	14	BCA	IRON40
NGET	Large Unit Coal + AGT	Kingsnorth	E.ON UK plc	1966	1966	1966	1966	1966	1966	1966	Z15	Yes		2088	17	BCA	KINO40
NGET	Large Unit Coal + AGT	Ratcliffe-on-Soar	E.ON UK plc	2021	2021	2021	2021	2021	2021	2021	Z11	Yes		2068	14	BCA	RATS40
NGET	Large Unit Coal + AGT	Rugeley B	Rugeley Power Ltd	1018	1018	1018	1018	1018	1018	1018	Z11	Yes		1026	14	BCA	RUGE40
NGET	Large Unit Coal + AGT	West Burton A	West Burton Ltd	1987	1987	1987	1987	1987	1987	1987	Z10	Yes		2012	13	BCA	WBUR40
NGET	Medium Unit Coal + AGT	Tilbury	RWE Npower plc	1121	1121	1121	1121	1121	1121	1121	Z15	Yes		1468	17	BCA	TILB20
NGET	Nuclear AGR	Dungeness B	British Energy Generation (UK) Ltd	1081	1081	1081	1081	1081	1081	1081	Z15	Yes		1320	17	BCA	DUNG40
NGET	Nuclear AGR	Hartlepool	British Energy Generation (UK) Ltd	1207	1207	1207	1207	1207	1207	1207	Z7	Yes		1332	10	BCA	HATL20
NGET	Nuclear AGR	Heysham 1	British Energy Generation (UK) Ltd	1203	1203	1203	1203	1203	1203	1203	Z9	Yes		2676	9	BCA	HEYS40
NGET	Nuclear AGR	Heysham 2	British Energy Generation (UK) Ltd	1203	1203	1203	1203	1203	1203	1203	Z9	Yes			9	BCA	HEYS40
NGET	Nuclear AGR	Hinkley Point	British Energy Generation (UK) Ltd	1261	1261	1261	1261	1261	1261	1261	Z17	Yes		1400	19	BCA	HINP40

NGET	Nuclear Magnox	Oldbury	Magnox Electric Ltd	470.4	0	0	0	0	0	0	Z13	Yes		471	15	BCA	OLDS10
NGET	Nuclear Magnox	Wylfa	Magnox Electric Ltd	980	980	0	0	0	0	0	Z9	Yes		1100	11	BCA	WYLF40
NGET	Nuclear PWR	Sizewell B	British Energy Generation (UK) Ltd	1200	1200	1200	1200	1200	1200	1200	Z12	Yes		1320	14	BCA	SIZE40
NGET	OCGT	Cowes	RWE Npower plc	145	145	145	145	145	145	145	Z16	Yes			19	BEGA	FAWL40
NGET	OCGT	Didcot A GTs	RWE Npower plc	100	100	100	100	100	100	100	Z13	Yes			18	BEGA	DIDC40
NGET	OCGT	Indian Queens	AES Indian Queens Power Ltd	140	140	140	140	140	140	140	Z17	Yes		140	20	BCA	INDQ40
NGET	OCGT	Lynes Common	BP (CHP) Ltd	49.9	49.9	49.9	49.9	49.9	49.9	49.9	Z16	Yes			19	BEGA	N/A
NGET	OCGT	Taylors Lane	E.ON UK plc	144	144	144	144	144	144	144	Z14	Yes		144	16	BCA	WISD20_LPN
NGET	Offshore Wind	Bristol Channel Offshore Windfarm	Channel Energy Ltd							1512	Z17	Yes		1512	20	BCA	
NGET	Offshore Wind	Docking Shoal Wind Farm Ltd	Centrica (DSW) Ltd	0	0	0	500	500	500	500	Z12	Yes		500	13	BCA	WALP40_EME
NGET	Offshore Wind	Greater Gabbard Offshore Wind Farm	Greater Gabbard Offshore Winds Ltd	0	500	500	500	500	500	500	Z12	Yes		500	14	BCA	SIZE40
NGET	Offshore Wind	Gwynt Y Mor Stage 1	Gwynt Y Mor Offshore Wind Farm Ltd				294	294	294	294	Z9	Yes		294	13	BCA	
NGET	Offshore Wind	Gwynt Y Mor Stage 2	Gwynt Y Mor Offshore Wind Farm Ltd					294	294	294	Z9	Yes		588	13	BCA	
NGET	Offshore Wind	Gwynt Y Mor Stage 3	Gwynt Y Mor Offshore Wind Farm Ltd						147	147	Z9	Yes		735	13	BCA	
NGET	Offshore Wind	Heysham Offshore Wind Farm	Heysham Offshore Wind Ltd	140	140	140	140	140	140	140	Z9	Yes		140	9	BCA	HEYS40
NGET	Offshore Wind	Humber Gateway	E.ON UK Renewables Developments Ltd				300	300	300	300	Z8	Yes		300	9	BCA	
NGET	Offshore Wind	Lincs Offshore Wind Farm	Offshore Windpower Ltd	0	250	250	250	250	250	250	Z12	Yes		250	13	BCA	WALP40_EME
NGET	Offshore Wind	London Array Stage 1	E.ON UK plc	0	0	200	200	200	200	200	Z15	Yes		200	17	BCA	CLEV40
NGET	Offshore Wind	London Array Stage 2	E.ON UK plc	0	0	800	800	800	800	800	Z15	Yes		800	17	BCA	CLEV40
NGET	Offshore Wind	Race Bank Wind Farm	Centrica (RBW) Ltd	0	0	0	0	0	500	500	Z12	Yes		500	13	BCA	WALP40_EME
NGET	Offshore Wind	Sheringham Shoal	Scira Offshore Energy Ltd	0	0	315	315	315	315	315	Z12	Yes			14	BEGA	
NGET	Offshore Wind	Thanet	Thanet Offshore Wind Ltd		300	300	300	300	300	300	Z15	Yes			17	BEGA	
NGET	Oil + AGT	Fawley	RWE Npower plc	1036	1036	1036	1036	1036	1036	1036	Z16	Yes		1036	19	BCA	FAWL40
NGET	Oil + AGT	Grain	E.ON UK plc	1355	1355	1355	1355	1355	1355	1355	Z15	Yes		2895	17	BCA	GRAI40

NGET	Oil + AGT	Littlebrook	RWE Npower plc	1245	1245	1245	1245	1245	1245	1245	Z14	Yes		1475	17	BCA	LITT40
NGET	Pumped Storage	Dinorwig	First Hydro Company	1644	1644	1644	1644	1644	1644	1644	Z9	Yes		1800	12	BCA	DINO40
NGET	Pumped Storage	Ffestiniog	First Hydro Company	360	360	360	360	360	360	360	Z9	Yes		360	13	BCA	FFES20
NGET	Small Unit Coal	Lynemouth	Alcan Aluminium UK Ltd	420	420	420	420	420	420	420	Z7		Yes	420	10	BELLA	BLYT20
NGET	Small Unit Coal	Uskmouth	Uskmouth Power Company	363	363	363	363	363	363	363	Z13	Yes		363	15	BCA	USKM2A / USKM2C / USKM2D
NGET	Wind	Rhigos	Nuon UK Projects (SR03) Ltd	0	0	0	299	299	299	299	Z13	Yes		299	15	BCA	RHIG40
SHETL	CCGT	Peterhead	SSE Generation Ltd	1524	1524	1524	1524	1524	1524	1524	Z2	Yes		1524	2	BCA	PEHE20
SHETL	CHP	Stoneywood Mills (Wiggins Teape Stoneywood)	Arjo Wiggins Fine Papers Ltd	12	12	12	12	12	12	12	Z2		Yes		1	BELLA	DYCE1Q / DYCE1R
SHETL	Hydro	Aigas	SSE Generation Ltd	20	20	20	20	20	20	20	Z1	Yes		20	1	BCA	AIGA1Q
SHETL	Hydro	Cashlie	SSE Generation Ltd	11.12	11.12	11.12	11.12	11.12	11.12	11.12	Z3	Yes			4	BEGA	KIIN10
SHETL	Hydro	Cassley	SSE Generation Ltd	10	10	10	10	10	10	10	Z1		Yes		1	BELLA	CASS1Q
SHETL	Hydro	Ceannacroc	SSE Generation Ltd	20	20	20	20	20	20	20	Z1	Yes			3	BEGA	CEAN1Q
SHETL	Hydro	Clachan	SSE Generation Ltd	40	40	40	40	40	40	40	Z4		Yes		5	BELLA	CLAC1Q
SHETL	Hydro	Clunie	SSE Generation Ltd	61.2	61.2	61.2	61.2	61.2	61.2	61.2	Z3	Yes		61.200000000000003	4	BCA	CLUN1S / CLUN1T
SHETL	Hydro	Culligran	SSE Generation Ltd	19.1	19.1	19.1	19.1	19.1	19.1	19.1	Z1	Yes		19	1	BCA	CULL1Q
SHETL	Hydro	Deanie	SSE Generation Ltd	38	38	38	38	38	38	38	Z1	Yes		38	1	BCA	DEAN1Q
SHETL	Hydro	Errochty	SSE Generation Ltd	75	75	75	75	75	75	75	Z3	Yes		75	4	BCA	ERRO10
SHETL	Hydro	Fasnakyle Compensation Hydro (Unit 4)	SSE Generation Ltd	0	0	0	0	0	0	7.5	Z1	Yes			3	BEGA	FASN10
SHETL	Hydro	Fasnakyle G1 & G3	SSE Generation Ltd	46	46	46	46	46	46	46	Z1	Yes		46	3	BCA	FASN10
SHETL	Hydro	Fasnakyle G2	SSE Generation Ltd	23	23	23	23	23	23	23	Z1	Yes			3	BEGA	FASN10
SHETL	Hydro	Finlarig	SSE Generation Ltd	16.5	16.5	16.5	16.5	16.5	16.5	16.5	Z3	Yes		17	4	BCA	FINL1Q
SHETL	Hydro	Glendoe, Fort Augustus	SSE Generation Ltd	0	0	0	0	100	100	100	Z1	Yes		100	3	BCA	GLDO10
SHETL	Hydro	Glenmorrison	SSE Generation Ltd	37	37	37	37	37	37	37	Z1	Yes		37	3	BCA	GLEN1Q
SHETL	Hydro	Grudie Bridge	SSE Generation Ltd	21.7	21.7	21.7	21.7	21.7	21.7	21.7	Z1		Yes		1	BELLA	GRUB1Q / GRUB1R
SHETL	Hydro	Inverawe	SSE Generation Ltd	25	25	25	25	25	25	25	Z4		Yes		5	BELLA	TAYN1Q / TAYN1R

SHETL	Hydro	Invergarry	SSE Generation Ltd	20	20	20	20	20	20	20	Z1	Yes		20	3	BCA	INGA1Q
SHETL	Hydro	Kilmorack	SSE Generation Ltd	20	20	20	20	20	20	20	Z1	Yes		20	1	BCA	KIOR1Q
SHETL	Hydro	Kinlochleven	Alcan Aluminium UK Ltd	30	30	30	30	30	30	30	Z1		Yes		3	BELLA	KILO10
SHETL	Hydro	Livishie	SSE Generation Ltd	15	15	15	15	15	15	15	Z1	Yes		15	3	BEGA	GLEN1Q
SHETL	Hydro	Lochay	SSE Generation Ltd	47	47	47	47	47	47	47	Z3	Yes		47	4	BCA	LOCH10
SHETL	Hydro	Luichart	SSE Generation Ltd	34	34	34	34	34	34	34	Z1	Yes		34	1	BCA	LUIC1Q / LUIC1R
SHETL	Hydro	Mossford	SSE Generation Ltd	18.66	18.66	18.66	18.66	18.66	18.66	18.66	Z1	Yes		18.699999999999999	1	BCA	MOSS1Q / MOSS1R
SHETL	Hydro	Nant	SSE Generation Ltd	15	15	15	15	15	15	15	Z4	Yes		15	5	BCA	LOCN1Q
SHETL	Hydro	Orrin	SSE Generation Ltd	18	18	18	18	18	18	18	Z2	Yes		18	1	BCA	ORRI1Q
SHETL	Hydro	Pitlochry	SSE Generation Ltd	15	15	15	15	15	15	15	Z3	Yes		15	4	BEGA	CLUN1S / CLUN1T
SHETL	Hydro	Quoich	SSE Generation Ltd	18	18	18	18	18	18	18	Z1	Yes		22	3	BCA	QUOI10
SHETL	Hydro	Rannoch	SSE Generation Ltd	44	44	44	44	44	44	44	Z3		Yes		4	BELLA	RANN1Q / RANN1R
SHETL	Hydro	Shin	SSE Generation Ltd	18.62	18.62	18.62	18.62	18.62	18.62	18.62	Z1		Yes		1	BELLA	SHIN10
SHETL	Hydro	Sloy G1 & G4	SSE Generation Ltd	72.5	72.5	72.5	72.5	72.5	72.5	72.5	Z4	Yes			5	BEGA	SLOY10
SHETL	Hydro	Sloy G2 & G3	SSE Generation Ltd	80	80	80	80	80	80	80	Z4	Yes		80	5	BCA	SLOY10
SHETL	Hydro	St Fillans	SSE Generation Ltd	16.8	16.8	16.8	16.8	16.8	16.8	16.8	Z3		Yes		4	BELLA	SFIL1Q
SHETL	Hydro	Torr Achilty	SSE Generation Ltd	15	15	15	15	15	15	15	Z1	Yes			1	BEGA	BEAU10
SHETL	Hydro	Tummel	SSE Generation Ltd	34	34	34	34	34	34	34	Z3		Yes		4	BELLA	TUMB1Q / TUMB1R
SHETL	OCGT	Flotta Terminal	Talisman Energy (UK) Ltd	10	10	10	10	10	10	10	Z1		Yes		1	BELLA	THSO1Q / THSO1R
SHETL	Pumped Storage	Foyers	SSE Generation Ltd	300	300	300	300	300	300	300	Z1	Yes		300	1	BCA	FOYE20
SHETL	Wind	Akron Wind (Caithness)	SSE Generation Ltd	0	20	20	20	20	20	20	Z1		Yes		1	BELLA	DOUN10
SHETL	Wind	An Suidhe	An Suidhe Wind Farm Ltd	30	30	30	30	30	30	30	Z4	Yes		30	5	BCA	ERED10
SHETL	Wind	Ardkinglas, Clachan (SRO)	AMEC Project Investments Ltd	19.25	19.25	19.25	19.25	19.25	19.25	19.25	Z4		Yes		5	BELLA	CLAC10
SHETL	Wind	Ark Hill Wind Farm, Glamis (SRO)	Renewable Energy Systems Ltd	12	12	12	12	12	12	12	Z3		Yes		4	BELLA	COUA10
SHETL	Wind	Aultmore Windfarm	AMEC Project Investments Ltd	0	0	0	0	0	60	60	Z1	Yes		60	1	BCA	AULW1Q / AULW1S
SHETL	Wind	Baillie & Bardnaheigh Wind	Baillie Windfarm Ltd	0	0	0	0	0	0	57	Z1	Yes			1	BEGA	BABW1Q

SHETL	Wind	Ballindalloch Muir Wind Farm, Balfron	Ballindalloch Muir Wind Farm	0	20.8	20.8	20.8	20.8	20.8	20.8	Z3		Yes		5	BELLA	BAMW10
SHETL	Wind	Beatrice	Talisman Energy (UK) Ltd	0	0	0	0	10	10	10	Z1		Yes		1	BELLA	DUBE1Q
SHETL	Wind	Beinn an Turic 2	CRE Energy Ltd	0	0	0	0	60	60	60	Z4	Yes			5	BEGA	
SHETL	Wind	Beinn an Turic Wind (SRO)	CRE Energy Ltd	30.36	30.36	30.36	30.36	30.36	30.36	30.36	Z4		Yes		5	BELLA	CAAD1Q
SHETL	Wind	Beinn Tharsuinn	CRE Energy Ltd	29	29	29	29	29	29	29	Z1	Yes			1	BEGA	ALNE1Q / ALNE1R
SHETL	Wind	Ben Aketil Wind	Ben Aketil Wind Farm Ltd	21	21	21	21	21	21	21	Z1		Yes		3	BELLA	DUGR1Q
SHETL	Wind	Ben Aketil Wind (Add. Cap.)	Ben Aketil Wind Farm Ltd	7	7	7	7	7	7	7	Z1		Yes		3	BELLA	DUGR1Q
SHETL	Wind	Berry Burn Windfarm	Catamount Energy Ltd	0	0	0	0	82.5	82.5	82.5	Z1		Yes		1	BELLA	CAKW2Q
SHETL	Wind	Black Craig 40MW Windfarm, Dunoon	Argyll Wind Farms	0	0	0	0	40	40	40	Z3		Yes		5	BELLA	DUNO1Q / DUNO1R
SHETL	Wind	Black Craig 90MW, Dunoon	Infinergy Ltd							90	Z4	Yes		90	5	BCA	
SHETL	Wind	Boulfrich Wind, Dunbeath	Boulfrich Wind Farm Ltd	14	14	14	14	14	14	14	Z1		Yes		1	BELLA	DUBE1Q
SHETL	Wind	Boyndie Wind	Boyndie Wind Energy Ltd	14.3	14.3	14.3	14.3	14.3	14.3	14.3	Z2		Yes		1	BELLA	KEIT10 / MACD1Q
SHETL	Wind	Boyndie Wind (Add. Cap.)	Boyndie Wind Energy Ltd	7	7	7	7	7	7	7	Z2		Yes		1	BELLA	KEIT10 / MACD1Q
SHETL	Wind	Braes of Doune	Airtricity Developments (Scotland) Ltd	74	74	74	74	74	74	74	Z4	Yes			6	BEGA	BRAC1Q / BRAC1R
SHETL	Wind	Cairn Uish Wind, Rothes	Rothes Wind Ltd	50.6	50.6	50.6	50.6	50.6	50.6	50.6	Z1		Yes		1	BELLA	DAAS20
SHETL	Wind	Calliachar Wind Farm, Aberfeldy	I & H Brown Ltd	0	0	0	0	0	62.1	62.1	Z3	Yes		96	4	BCA	CALW20
SHETL	Wind	Camster	Powergen Renewables Ltd	0	0	0	0	0	62.5	62.5	Z1		Yes		1	BELLA	MYBS1Q / MYBS1R
SHETL	Wind	Carraig Gheal (Fernoch)	Greenpower (Carraig Gheal) Ltd	0	0	60	60	60	60	60	Z4	Yes		60	5	BCA	FERO10
SHETL	Wind	Causeymire	Causeymire Windfarm Ltd	48.3	48.3	48.3	48.3	48.3	48.3	48.3	Z1		Yes		1	BELLA	MYBS1Q / MYBS1R
SHETL	Wind	Causeymire Phase 2	Causeymire Windfarm Ltd	0	0	0	6.9	6.9	6.9	6.9	Z1		Yes		1	BELLA	MYBS1Q / MYBS1R
SHETL	Wind	Clashindarroch Wind, Huntly	AMEC Project Investments Ltd	0	0	0	0	0	112.7	112.7	Z2	Yes			1	BEGA	CLAS20
SHETL	Wind	Cruach Mhor	CRE Energy Ltd	29.75	29.75	29.75	29.75	29.75	29.75	29.75	Z3		Yes		5	BELLA	DUNO1Q / DUNO1R
SHETL	Wind	Deucheran Hill	E.ON UK Renewables Ltd	15	15	15	15	15	15	15	Z4		Yes		5	BELLA	CAAD1Q / CAAD1R
SHETL	Wind	Drumderg Wind Farm, Dalrulzion	SSE Generation Ltd	32	32	32	32	32	32	32	Z3		Yes		4	BELLA	COUA10

SHETL	Wind	Dummuies Windfarm, Insch	Eco 2 Ltd	10.4	10.4	10.4	10.4	10.4	10.4	10.4	Z2		Yes		1	BELLA	KINT10
SHETL	Wind	Dunbeath Wind Farm	Dunbeath Wind Energy Ltd	0	0	0	0	0	55	55	Z1		Yes		1	BELLA	DUBE1Q
SHETL	Wind	Edinbane Wind, Skye	AMEC Project Investments Ltd	0	42	42	42	42	42	42	Z1	Yes		56	3	BCA	EDIN10
SHETL	Wind	Eishken Estate, Isle of Lewis	Beinn Mhor Power Ltd	0	0	0	0	0	0	300	Z1	Yes		300	3	BCA	ULLA20
SHETL	Wind	Fairburn Wind Farm	SSE Generation Ltd	0	42	42	42	42	42	42	Z1		Yes		1	BELLA	ORRI1Q / ORRI1R
SHETL	Wind	Fairwind (Orkney) Ltd	Fairwind (Orkney) Ltd	0	0	0	0	0	126	126	Z1	Yes			1	BEGA	DOUN10
SHETL	Wind	Farr Wind Farm, Tomatin	Farr Wind Farm Ltd	92	92	92	92	92	92	92	Z1	Yes		92	1	BCA	FAAR1Q / FAAR1R
SHETL	Wind	Glens of Foudland Wind (SRO)	Glens of Foudland Wind Farm Ltd	26	26	26	26	26	26	26	Z2	Yes			1	BEGA	KEIT10 / KINT10
SHETL	Wind	Gordonbush Wind	SSE Generation Ltd	0	87.5	87.5	87.5	87.5	87.5	87.5	Z1	Yes		87.5	1	BCA	GORW20
SHETL	Wind	Griffin Windfarm	GreenPower (Griffin) Ltd	0	0	216	216	216	216	216	Z3	Yes		216	4	BCA	GRIF1S / GRIF1T
SHETL	Wind	Kilbraur Wind Farm Stage 1	Kilbraur Wind Energy Ltd	47.5	47.5	47.5	47.5	47.5	47.5	47.5	Z1	Yes		47.5	1	BCA	STRB20
SHETL	Wind	Kilbraur Wind Farm Stage 2	Kilbraur Wind Energy Ltd	0	19.5	19.5	19.5	19.5	19.5	19.5	Z1	Yes		19.5	1	BCA	STRB20
SHETL	Wind	Kingsburn Wind farm, Fintry, Stirling	Scottish Hydro-Electric Power Distribution Ltd	0	20	20	20	20	20	20	Z4		Yes		6	BELLA	KIBU10
SHETL	Wind	Lairg - Achany Wind Farm	SSE Generation Ltd	0	62	62	62	62	62	62	Z1		Yes		1	BELLA	LAIR1Q
SHETL	Wind	Mid Hill Wind, Stonehaven	Mid Hill Wind Ltd	0	0	0	0	75	75	75	Z2		Yes		1	BELLA	MIHW2Q
SHETL	Wind	Millenium Wind, Ceannacroc Stage 1	Millenium Wind Energy Ltd	40	40	40	40	40	40	40	Z1	Yes		40	3	BCA	MILW1S
SHETL	Wind	Millenium Wind, Ceannacroc Stage 2	Millenium Wind Energy Ltd	10	10	10	10	10	10	10	Z1	Yes		10	3	BCA	MILW1S
SHETL	Wind	Millenium Wind, Ceannacroc Stage 3	Millenium Wind Energy Ltd	0	15	15	15	15	15	15	Z1	Yes		15	3	BCA	MILW1S
SHETL	Wind	Montreathmont Moor Wind, Angus	Scottish Hydro-Electric Power Distribution Ltd	0	0	0	0	0	40	40	Z2		Yes		1	BELLA	BRID1Q
SHETL	Wind	North Nesting Wind, Shetland	SSE Generation Ltd	0	0	0	0	0	0	250	Z1	Yes		250	1	BCA	NNEW20
SHETL	Wind	Novar	Beaufort Wind Ltd	18.5	18.5	18.5	18.5	18.5	18.5	18.5	Z1		Yes		1	BELLA	ALNE1Q / ALNE1R
SHETL	Wind	Novar 2 Wind Farm, Alness	Novar 2 Wind Farm Ltd	0	0	0	0	0	0	32	Z2		Yes	32	1	BELLA	ALNE1Q / ALNE1R
SHETL	Wind	Pairc (South Lochs) Wind, Lewis	SSE Generation Ltd	0	0	0	0	0	250	250	Z1	Yes		250	3	BCA	ULLA20

SHETL	Wind	Paul's Hill Wind	Paul's Hill Wind Ltd	70	70	70	70	70	70	70	Z1		Yes		1	BELLA	GLFA10
SHETL	Wind	Pentland Road Wind, Lewis	Farm Energy Ltd	0	0	0	0	0	13	13	Z1		Yes		3	BELLA	ARMO10
SHETL	Wind	Shira	Shira Wind Limited	0	0	0	0	52	52	52	Z4	Yes		75	5	BCA	SHRA10
SHETL	Wind	Stacain Wind Farm, Sron Mor, Inveraray	Wind Prospect Ltd	0	0	0	0	42	42	42	Z4	Yes		28	5	BCA	SROM10
SHETL	Wind	Strathy North & South Wind	SSE Generation Ltd	0	0	0	0	226	226	226	Z1	Yes		226	1	BCA	STRW20
SHETL	Wind	Stroupster Wind Farm, near Wick, Caithness	Stroupster Wind Farm Ltd	0	0	0	0	0	0	31.5	Z1		Yes	31.5	1	BELLA	THSO1Q / THSO1R
SHETL	Wind	Tangy (1) Wind, Argyll	SSE Generation Ltd	13	13	13	13	13	13	13	Z4		Yes		5	BELLA	CAAD1Q / CAAD1R
SHETL	Wind	Tangy (Add. Cap.)	SSE Generation Ltd	6	6	6	6	6	6	6	Z4		Yes		5	BELLA	CAAD1Q / CAAD1R
SHETL	Wind	Tomatin Windfarm	Eurus Energy UK Ltd	0	0	0	0	30	30	30	Z1		Yes		1	BELLA	BOAG1Q
SHETL	Wind	Tullo Wind Farm, Laurencekirk	Tullo Wind Farm Ltd	13.5	13.5	13.5	13.5	13.5	13.5	13.5	Z2		Yes		4	BELLA	BREC10
SPT	Biomass	Rothes Biopower Plant	Scottish BioPower Ltd	0	0	52	52	52	52	52	Z5	Yes			6	BEGA	BLHI20
SPT	Biomass	Stevens Croft	E.ON UK plc	45	45	45	45	45	45	45	Z6		Yes		7	BELLA	CHAP10
SPT	CHP	BP Grangemouth	Grangemouth CHP Ltd	120	120	120	120	120	120	120	Z6	Yes			6	BEGA	GRMO20
SPT	CHP	Fife Energy Stage 1	SSE Generation Ltd	63	63	63	63	63	63	63	Z5	Yes		135	6	BCA	FIFE10
SPT	CHP	Fife Energy Stage 2	SSE Generation Ltd	60	60	60	60	60	60	60	Z5	Yes			6	BCA	FIFE10
SPT	Hydro	Tongland	ScottishPower Generation Ltd	33	33	33	33	33	33	33	Z6		Yes		7	BELLA	TONG10
SPT	Interconnector	Moyle Interconnector (Import)	Moyle Interconnector Ltd	80	80	80	80	80	80	80	Z6	Yes		80	8	BCA	AUCH20
SPT	Large Unit Coal	Longannet	ScottishPower Generation Ltd	2304	2304	2304	2304	2304	2304	2304	Z5	Yes		2304	6	BCA	LOAN20
SPT	Medium Unit Coal	Cockenzie	ScottishPower Generation Ltd	1152	1152	1152	1152	1152	1152	1152	Z6	Yes		1152	7	BCA	COCK20
SPT	Nuclear AGR	Hunterston	British Energy Generation (UK) Ltd	1210	1210	1210	1210	1210	1210	1210	Z6	Yes		1320	7	BCA	HUER40
SPT	Nuclear AGR	Torness	British Energy Generation (UK) Ltd	1200	1200	1200	1200	1200	1200	1200	Z6	Yes		1370	7	BCA	TORN40
SPT	Pumped Storage	Cruachan	ScottishPower Generation Ltd	440	440	440	440	440	440	440	Z3	Yes		440	5	BCA	CRUA2Q / CRUA2R
SPT	Wind	Afton	E.ON UK Renewables Developments Ltd	0	0	0	0	77	77	77	Z6	Yes		77	7	BCA	AFTN10
SPT	Wind	Aikengall	Community Windpower Ltd	48	48	48	48	48	48	48	Z6		Yes		7	BELLA	AIKN10

SPT	Wind	Andershaw	Catamount Energy Limited	0	0	45	45	45	45	45	Z6	Yes		45	7	BCA	ANDS10
SPT	Wind	Arecleoch	CRE Energy Ltd	0	150	150	150	150	150	150	Z6	Yes		150	7	BCA	AREC10
SPT	Wind	Auchencorth	E.ON UK Renewables Developments Ltd	0	0	45	45	45	45	45	Z6	Yes		45	7	BCA	KAIM20
SPT	Wind	Barmoor	Catamount Energy Limited	0	0	30	30	30	30	30	Z6		Yes		7	BELLA	BERW1Q / BERW1R
SPT	Wind	Black Law	CRE Energy Ltd	134	134	134	134	134	134	134	Z6	Yes		134	7	BCA	BLLA10
SPT	Wind	Blackcraig	SSE Generation Ltd	0	0	0	0	0	71.3	71.3	Z5	Yes		71.299999999999997	5	BCA	BLCK10
SPT	Wind	Carscreugh, Dumfries & Galloway	Gamesa Energy UK Ltd	0	0	0	0	0	21	21	Z6	Yes			7	BCA	CCDG10
SPT	Wind	Clyde	Airtricity Developments (Scotland) Ltd	0	519	519	519	519	519	519	Z6	Yes		577	7	BCA	CLYDE20
SPT	Wind	Crystal Rig 1	Crystal Rig Windfarm Ltd	62.5	62.5	62.5	62.5	62.5	62.5	62.5	Z6		Yes		7	BELLA	DUNB1Q / DUNB1R
SPT	Wind	Crystal Rig 2	Fred Olsen Renewables Ltd	0	200	200	200	200	200	200	Z6	Yes		200	7	BCA	DUNB1Q / DUNB1R
SPT	Wind	Dalswinton	Airtricity Developments (Scotland) Ltd	30	30	30	30	30	30	30	Z6		Yes		7	BEGA	DUMF10
SPT	Wind	Dersalloch	CRE Energy Ltd	0	0	0	69	69	69	69	Z6	Yes		75	7	BCA	DERS10
SPT	Wind	Drone Hill	PM Renewables Ltd	0	0	37.8	37.8	37.8	37.8	37.8	Z6		Yes		7	BELLA	BERW1Q / BERW1R
SPT	Wind	Dun Law extension	CRE Energy Ltd	0	29.75	29.75	29.75	29.75	29.75	29.75	Z6	Yes		29.75	7	BCA	DUNE10
SPT	Wind	Earlsburn	Earlsburn Wind Energy Ltd	35	35	35	35	35	35	35	Z5		Yes		6	BELLA	STIR1Q / STIR1R
SPT	Wind	Earlshaugh	Wind Energy (Earlshaugh) Limited	0	0	108	108	108	108	108	Z6	Yes		108	7	BCA	MOFF40
SPT	Wind	Ewe Hill	CRE Energy Ltd	0	0	0	66	66	66	66	Z6	Yes		92	7	BCA	EWEH10
SPT	Wind	Fallago	FLR 2003 Ltd	0	144	144	144	144	144	144	Z6	Yes		180	7	BCA	FALL40
SPT	Wind	Greenock Wind Farm	Greenock Wind Farm (Scotland) Ltd	0	0	0	0	0	0	0	Z5		Yes		5	BELLA	DEVM10
SPT	Wind	Hadyard Hill	SSE Generation Ltd	130	130	130	130	130	130	130	Z6	Yes		144.40000000000001	7	BCA	MAYB10
SPT	Wind	Harestanes	CRE Energy Ltd	0	0	213	213	213	213	213	Z6	Yes		282	7	BCA	HARE10
SPT	Wind	Harrows Law	SSE Generation Ltd	0	0	0	140	140	140	140	Z6	Yes		247	7	BCA	HALA10
SPT	Wind	HearthStanes B Windfarm	Wind Energy (Hearthstanes) Limited	0	0	81	81	81	81	81	Z6	Yes		81	7	BCA	MOFF40
SPT	Wind	Kyle	AMEC Project Investments Ltd	0	0	0	300	300	300	300	Z6	Yes		300	7	BCA	KYLS10

SPT	Wind	Limmer Hill	Limmer Hill Wind Energy Limited	0	0	80	80	80	80	80	Z6	Yes		80	7	BCA	LIMM10
SPT	Wind	Longpark	Wind Prospect Ltd	0	38	38	38	38	38	38	Z6	Yes		48	7	BCA	LONP10
SPT	Wind	Margree	NBW Wind Energy Ltd	0	0	0	0	0	70	70	Z6	Yes		70	7	BCA	MARG10
SPT	Wind	Mark's Hill	Catamount Energy Ltd	99	99	99	99	99	99	99	Z6	Yes		99	7	BCA	MAHI20
SPT	Wind	Minsca	Minsca Wind Farm (Scotland) Ltd	37.5	37.5	37.5	37.5	37.5	37.5	37.5	Z6		Yes		7	BELLA	CHAP10
SPT	Wind	Neilston	Gamesa Energy UK Ltd	0	0	0	0	100	100	100	Z6	Yes		100	7	BCA	NELS10
SPT	Wind	Newfield	Wind Energy (Newfield) Limited	0	0	0	60	60	60	60	Z6	Yes		60	7	BCA	NEWF10
SPT	Wind	Pencloe	NBW Wind Energy Ltd	0	0	0	0	63	63	63	Z6	Yes		63	7	BCA	PENC10
SPT	Wind	Toddleburn	I & H Brown Toddleburn Ltd	0	36	36	36	36	36	36	Z6	Yes		36	7	BCA	TODD10
SPT	Wind	Tormywheel	PM Renewables Ltd	0	32.4	32.4	32.4	32.4	32.4	32.4	Z6		Yes		7	BELLA	BAGA1Q / BAGA1R
SPT	Wind	Ulzieside	NBW Wind Energy Ltd	0	0	0	0	69	69	69	Z6	Yes		69	7	BCA	ULZI10
SPT	Wind	Waterhead Moor	SSE Generation Ltd	0	0	0	120	120	120	120	Z6	Yes		155.30000000000001	5	BCA	WAMR10
SPT	Wind	Whitelee Stage 1	CRE Energy Ltd	75.9	75.9	75.9	75.9	75.9	75.9	75.9	Z6	Yes		322	7	BCA	WHIL20
SPT	Wind	Whitelee Stage 2	CRE Energy Ltd	218.5	218.5	218.5	218.5	218.5	218.5	218.5	Z6	Yes			7	BCA	WHIL20
SPT	Wind	Whitelee Stage 3	CRE Energy Ltd	0	28.6	28.6	28.6	28.6	28.6	28.6	Z6	Yes			7	BCA	WHIL20
SPT	Wind	Whiteside Hill	Airtricity Developments (Scotland) Ltd	0	0	0	0	27	27	27	Z6	Yes		27	7	BCA	WTSH10
SPT	Wind	Windy Standard 2	Brockloch Rig Windfarm Ltd	0	0	0	0	60	60	60	Z6	Yes		60	7	BCA	WIST10

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Table 3.6 - Generating Unit Data

Station Name	Set No	BM Unit	Plant Type	Unit Effective Capacity (MW)	Commissioning Year	MVAr Lead	MVAr Lag	MVA Infeed	Node	SYS Study Zone	Licensee
Abernedd Stage 1			CCGT	435	2014	-215.3	171.2	1703	BAGB20	Z13	NGET
Abernedd Stage 2			CCGT	435					BAGB20	Z13	NGET
Aberthaw B	7	T_ABTH7	Large Coal	547	1976	-163	193.9	1547	ABTH20	Z13	NGET
Aberthaw B	8	T_ABTH8	Large Coal	547	1971	-163.6	193.2	1561.9	ABTH20	Z13	NGET
Aberthaw B	9	T_ABTH9	Large Coal	547	1979	-162.8	194.1	1599.5	ABTH20	Z13	NGET
Aberthaw B		T_ABTH7G	OCGT	17	1967				ABTH20	Z13	NGET
Aberthaw B		T_ABTH8G	OCGT	17	1967				ABTH20	Z13	NGET
Aberthaw B		T_ABTH9G	OCGT	17	1967				ABTH20	Z13	NGET
Afton, Windy Standard	1		Wind	77	2010	-25.3	25.3	360	BLAC30	Z2	SPT
Aigas	1		Hydro	20		-1.1	-1.1	110	AIGA1Q	Z1	SHETL
Aigas	2		Hydro	20		0	0	39	AIGA80	Z1	SHETL
Aikengall			Wind	48	2009	-15.8	15.8	252	AIKE30	Z6	SPT
Akron Wind	1		Wind	20	2009	-6.5	6.5	97	AKRW8W	Z1	SHETL
Amlwch			CCGT	270	2012	-126.9	119.7	916.7	AMLW40	Z9	NGET
Andershaw			Wind	45	2010	-14.8	14.8	211	ANDE30	Z4	SPT
Ardkinglas	1		Wind	19	2008	-3.5	3.5	129	ARDK80	Z1	SHETL
Arecleoch			Wind	150	2009	-49.3	49.3	703	AREC3A	Z6	SPT
Ark Hill Wind	1		Wind	12	2006	-1	-1	61	ARHW80	Z4	SHETL
Auchencorth			Wind	45	2010	-14.8	14.8	181	AUCC30	Z6	SPT
Aultmore Wind	1		Wind	60	2013	-19.7	19.7	290	AULW8W	Z1	SHETL

Baglan Bay		T_BAGE-1	CCGT	520	2002	-295	173.7	1583.7	BAGB20	Z13	NGET
Baglan Bay		T_BAGE-2	CCGT	32.3	2002	-14.6	11.3	109	BAGB20	Z13	NGET
Baillie & Bardnaheigh	1		Wind	57	2014	-16.4	9.6	289.2	BABW8W	Z1	SHETL
Ballindalloch Muir Wind	1		Wind	21	2009	-6.9	6.9	114	BAMW30	Z1	SHETL
Barking		T_BARK-1	CCGT	127.5	1994	-65.9	52.4	485.9	BARP21	Z14	NGET
Barking		T_BARK-1	CCGT	127.5	1994	-66	52.4	485.5	BARP21	Z14	NGET
Barking		T_BARK-1	CCGT	139.5	1994	-69.5	50.1	499.3	BARP21	Z14	NGET
Barking		T_BARKB2	CCGT	127.5	1994	-66.8	55.2	489.1	BARP22	Z14	NGET
Barking		T_BARKB2	CCGT	127.5	1994	-65.9	52.4	485.8	BARP22	Z14	NGET
Barking		T_BARKB2	CCGT	127.5	1994	-66	52.3	485	BARP22	Z14	NGET
Barking		T_BARKB2	CCGT	223	1994	-115.9	70.1	594.7	BARP22	Z14	NGET
Barmoor			Wind	30	2008	-9.9	9.9	141	BARM30	Z6	SPT
Barry	1		CCGT	245	1998	-74.1	45.2	645.8	AESB11	Z13	NGET
Barry	2		CCGT	75	1998	-31.6	23.6	324.4	AESB11	Z13	NGET
Beinn an Tuirc	1		Wind	30	2001	-6	-6	153	BTUI8W	Z3	SHETL
Beinn an Tuirc 2			Wind	60	2012	-19.7	19.7	261	BTU230	Z3	SHETL
Beinn Tharsuinn	1		Wind	29	2004	-5	5	152	BETH80	Z1	SHETL
Ben Aketil	1		Wind	28	2007	-6.9	6.9	143	BENA80	Z1	SHETL
Black Craig 40MW Wind Farm	1		Wind	40	2012	-13.1	13.1	198	BLCK30	Z1	SHETL
Black Law	1		Wind	67	2005	-31.5	21.8	244	BLLA11	Z6	SPT
Black Law	2		Wind	67	2005	-31.5	21.9	244.2	BLLA11	Z6	SPT
Blackcraig			Wind	71	2013	-23.3	23.3	330	BLCW30	Z1	SPT
Blyth			IGCC with CCS	1600	2014	-808.6	561	5232.6	BLYT40	Z7	NGET
Boyndie	1		Wind	21	2005	-7	7	104	BOYN8W	Z2	SHETL
Braes of Doune Wind	1		Wind	37	2004	-7.3	10.7	258	BRDU81	Z4	SHETL
Braes of Doune Wind	2		Wind	37	2004	-7.3	10.7	258	BRDU82	Z4	SHETL
Brigg	1		CCGT	44	1993	-16.3	22.2	221.4	BRIG10	Z8	NGET
Brigg	2		CCGT	44	1993	-16.3	22.2	221.4	BRIG11	Z8	NGET
Brigg	3		CCGT	45	1993	-16.4	22.1	221.4	BRIG12	Z8	NGET
Brigg	4		CCGT	45	1993	-16.4	22.1	221.4	BRIG13	Z8	NGET
Brigg	5		CCGT	45	1993	-16.4	22.1	221.4	BRIG14	Z8	NGET
Brigg	6		CCGT	45	1993	-16.4	22.1	221.4	BRIG15	Z8	NGET
Brimsdown	1	T_EECL-1	CCGT	408	1999	-212.5	180.4	1080.5	BRIM10	Z14	NGET
Brine Field			CCGT	1020	2011	-814.3	397.7	2970.3	THOR40	Z7	NGET
Cairn Uish, Rothes	1		Wind	51	2004	-16	16	261	CAIR8W	Z1	SHETL
Calliachar Wind	1		Wind	31	2013	-10.2	10.2	226	CALW81	Z4	SHETL
Calliachar Wind	2		Wind	31	2013	-10.2	10.2	226	CALW82	Z4	SHETL

Camster Windfarm	1		Wind	62	2013	-20.4	20.4	313	CAMW8W	Z1	SHETL
Carn Kitty / Little Berry Burn	1		Wind	83	2012	-27.1	27.1	400	CAKW8W	Z1	SHETL
Carraig Gheal (Fernoch)	1		Wind	60	2010	-19.7	19.7	391	FERO80	Z3	SHETL
Carscreugh, Dumfries & Galloway			Wind	21	2013	-6.9	6.9		DUMF10	Z6	SPT
Cashlie	1		Hydro	11		-1	-1	34	CASH30	Z4	SHETL
Cassley			Hydro	10						Z1	SHETL
Causeymire	1		Wind	27	2004	-2.5	-2.5	141	CAUS81	Z1	SHETL
Causeymire	2		Wind	27	2004	-2.5	-2.5	141	CAUS82	Z1	SHETL
Ceannacroc	1		Hydro	10		-0.9	-0.9	65	CEAN1Q	Z1	SHETL
Ceannacroc	2		Hydro	10		0	0	24	CEAN80	Z1	SHETL
Clachan	1		Hydro	40		-4	-4	147	CLAC1Q	Z4	SHETL
Clashindarroch Wind	1		Wind	113	2013	-37.1	37.1	552	CLAS8W	Z2	SHETL
Clunie	1	CAS-CLU01	Hydro	20.3		-0.8	-0.8	80	CLUN1Q	Z4	SHETL
Clunie	2		Hydro	20.3		0	0	94	CLUN82	Z4	SHETL
Clunie	3		Hydro	20.3		0	0	94	CLUN82	Z4	SHETL
Clyde	1		Wind	86.5	2009	-28.4	28.4	452.5	CLYD8A	Z6	SPT
Clyde	2		Wind	86.5	2009	-28.4	28.4	452.5	CLYD8B	Z6	SPT
Clyde	3		Wind	86.5	2009	-28.4	28.4	452.5	CLYD8C	Z6	SPT
Clyde	4		Wind	86.5	2009	-28.4	28.4	464.9	CLYD8D	Z6	SPT
Clyde	5		Wind	86.5	2009	-28.4	28.4	440.2	CLYD8E	Z6	SPT
Clyde	6		Wind	86.5	2009	-28.4	28.4	440.2	CLYD8F	Z6	SPT
Cockenzie	1	COCK-1	Large Coal	288		-108	117	941	COCK20	Z6	SPT
Cockenzie	2	COCK-2	Large Coal	288		-108	117	941	COCK20	Z6	SPT
Cockenzie	3	COCK-3	Large Coal	288		-56	-56	941	COCK20	Z6	SPT
Cockenzie	4	COCK-4	Large Coal	288		-56	-56	941	COCK20	Z6	SPT
Connahs Quay		T_CNQPS-1	CCGT	345	1996	-174.4	157.2	1061.6	DEES41	Z9	NGET
Connahs Quay		T_CNQPS-2	CCGT	345	1996	-174.5	157.1	1061	DEES41	Z9	NGET
Connahs Quay		T_CNQPS-3	CCGT	345	1996	-174.7	156.8	1059.2	DEES41	Z9	NGET
Connahs Quay		T_CNQPS-4	CCGT	345	1996	-174.6	157.8	1060	DEES41	Z9	NGET
Corby			CCGT	133.7	1993	-84.9	55.9	457.2	GREN11	Z12	NGET
Corby			CCGT	133.7	1993	-84.9	55.9	457.2	GREN12	Z12	NGET
Corby			CCGT	133.7	1993	-84.9	55.9	457.2	GREN12	Z12	NGET
Coryton		T_COSO-1	CCGT	266.7	2000	-135.4	130.9	1062.3	COSO40	Z15	NGET
Coryton		T_COSO-1	CCGT	266.7	2000	-135.4	130.9	1062.3	COSO40	Z15	NGET
Coryton		T_COSO-1	CCGT	266.7	2000	-122.4	155.6	1029.5	COSO40	Z15	NGET
Cottam	1	T_COTPS-1	Large Coal	495	1969	-193.4	174.1	1522	COTT40	Z10	NGET

Cottam	2	T_COTPS-2	Large Coal	505	1969	-190.2	154.9	1527.4	COTT40	Z10	NGET
Cottam	3	T_COTPS-3	Large Coal	505	1970	-195.1	155.4	1531.4	COTT40	Z10	NGET
Cottam	4	T_COTPS-4	Large Coal	495	1970	-192.1	175.7	1533.3	COTT40	Z10	NGET
Cottam Dev Centre		T_CDCL_01	CCGT	395	2000	-183.9	164.8	2043.8	COTT40	Z10	NGET
Cowes	1		OCGT	73	1982	-33.2	30.5	299	FAWL10	Z16	NGET
Cowes	2		OCGT	73	1982	-33.1	30.6	301	FAWL10	Z16	NGET
Cruach Mhor, Glendaruel	1		Wind	30	2004	-2.5	-2.5	148	CRMH8W	Z1	SHETL
Cruachan	1	CRUA-1	Pumped Storage	110		-59.3	37.1	441	CRUA2Q	Z4	SPT
Cruachan	2	CRUA-2	Pumped Storage	110		-59.2	37.2	442	CRUA2Q	Z4	SPT
Cruachan	3	CRUA-3	Pumped Storage	110		-59	37.4	507	CRUA2R	Z4	SPT
Cruachan	4	CRUA-4	Pumped Storage	110		-59	37.4	477	CRUA2R	Z4	SPT
Crystal Rig 2			Wind	200	2009	-65.7	65.7	611	CRYR30	Z6	SPT
Crystal Rigg, Duns	1		Wind	63	2003	-24.6	25.8	285.7	CRYR30	Z6	SPT
Culligran	1		Hydro	19		-1.1	6.9	70	CULL1Q	Z1	SHETL
Dalswinton			Wind	30						Z6	SPT
Damhead Creek		T_DAMC-1	CCGT	273	2000	-129.3	121.5	889.9	DAMC40	Z15	NGET
Damhead Creek		T_DAMC-1	CCGT	273	2000	-130.4	112	901.5	DAMC40	Z15	NGET
Damhead Creek		T_DAMC-1	CCGT	259	2000	-121.7	118.7	902.5	DAMC40	Z15	NGET
Deanie	1		Hydro	19		0	0	71	DEAN80	Z1	SHETL
Deanie	2		Hydro	19		0	0	71	DEAN80	Z1	SHETL
Deeside		T_DEEP-1	CCGT	89.5	1994	-85.4	73.3	696.9	DEES42	Z9	NGET
Deeside		T_DEEP-1	CCGT	163	1994	-85.4	73.3	696.9	DEES42	Z9	NGET
Deeside		T_DEEP-1	CCGT	148	1994	-67.4	101.2	598	DEES42	Z9	NGET
Dersalloch			Wind	69	2011	-22.7	22.7	323	DESA1P	Z6	SPT
Derwent			CCGT	41	1994	-22.9	22.8	143.6	WILL10	Z11	NGET
Derwent			CCGT	41	1994	-22.9	22.8	143.6	WILL10	Z11	NGET
Derwent			CCGT	41	1994	-22.9	22.8	143.6	WILL10	Z11	NGET
Derwent			CCGT	46	1994	-21.8	17.6	143.6	WILL10	Z11	NGET
Derwent			CCGT	63	1994	-30.7	15.3	241.9	WILL10	Z11	NGET
Deucherin Hill	1		Wind	15		-3	-3	77	DEUC8W	Z3	SHETL
Didcot A	1	T_DIDC1	Dual Fuel	527	1973	-267	183.6	1853.9	DIDC42	Z13	NGET
Didcot A	2	T_DIDC2	Dual Fuel	527	1972	-258.1	202.4	1873.6	DIDC42	Z13	NGET
Didcot A	3	T_DIDC3	Large Coal	527	1973	-264	187.1	1884.2	DIDC41	Z13	NGET
Didcot A	4	T_DIDC4	Dual Fuel	527	1975	-266.9	183.8	1851.7	DIDC41	Z13	NGET
Didcot A GT		T_DIDC1G	OCGT	25	1968				DIDC42	Z13	NGET
Didcot A GT		T_DIDC2G	OCGT	25	1969				DIDC42	Z13	NGET

Didcot A GT		T_DIDC3G	OCGT	25	1969				DIDC41	Z13	NGET
Didcot A GT		T_DIDC4G	OCGT	25	1970				DIDC41	Z13	NGET
Didcot B		T_DIDCB5	CCGT	240.7	1996	-89.9	60.9	824	DIDC41	Z13	NGET
Didcot B		T_DIDCB5	CCGT	240.7	1996	-89.9	60.9	824	DIDC41	Z13	NGET
Didcot B		T_DIDCB5	CCGT	293.4	1996	-111.9	76.1	854.9	DIDC41	Z13	NGET
Didcot B		T_DIDCB6	CCGT	237.7	1997	-88.2	64.3	823.4	DIDC42	Z13	NGET
Didcot B		T_DIDCB6	CCGT	237.7	1997	-84	72.5	823.4	DIDC42	Z13	NGET
Didcot B		T_DIDCB6	CCGT	299.8	1997	-122	105.2	854.3	DIDC42	Z13	NGET
Dinorwig	1	T_DINO-1	Pumped Storage	274	1984	-139.9	90.1	1140.5	DINO40	Z9	NGET
Dinorwig	2	T_DINO-2	Pumped Storage	274	1984	-139.9	90.1	1140.5	DINO40	Z9	NGET
Dinorwig	3	T_DINO-3	Pumped Storage	274	1983	-139.9	90.1	1140.5	DINO40	Z9	NGET
Dinorwig	4	T_DINO-4	Pumped Storage	274	1984	-139.9	90.1	1140.5	DINO40	Z9	NGET
Dinorwig	5	T_DINO-5	Pumped Storage	274	1984	-139.9	90.1	1140.5	DINO40	Z9	NGET
Dinorwig	6	T_DINO-6	Pumped Storage	274	1984	-139.9	90.1	1140.5	DINO40	Z9	NGET
Docking Shoal			Offshore Wind	500	2011	-164	164		WALP40	Z12	NGET
Dounreay Wind (Caithness)	1		Wind	18	2005	-4.5	4.5	141	DOUW8W	Z1	SHETL
Drakelow D		T_DRKWPS-9	CCGT	410	2009	-200.1	180.4	1351	DRAK41	Z11	NGET
Drakelow D		T_DRKWPS-10	CCGT	410	2009	-200.1	180.4	1351	DRAK42	Z11	NGET
Drakelow D		T_DRKWPS-12	CCGT	410	2009	-200.1	180.4	1351	DRAK41	Z11	NGET
Drax	1	T_DRAXX-1	Large Coal	649	1974	-289	268.2	2177.8	DRAX41	Z8	NGET
Drax	2	T_DRAXX-2	Large Coal	649	1974	-288.5	268.8	2182.6	DRAX41	Z8	NGET
Drax	3	T_DRAXX-3	Large Coal	649	1976	-290.5	266.4	2121.9	DRAX41	Z8	NGET
Drax	4	T_DRAXX-4	Large Coal	649	1984	-271.1	271.7	2207.8	DRAX42	Z8	NGET
Drax	5	T_DRAXX-5	Large Coal	649	1985	-271.9	270.8	2198.8	DRAX42	Z8	NGET
Drax	6	T_DRAXX-6	Large Coal	649	1986	-271	271.9	2209.7	DRAX42	Z8	NGET
Drax		T_DRAXX-10G	OCGT		1981				N/A	Z8	NGET
Drax		T_DRAXX-12G	OCGT		1981				N/A	Z8	NGET
Drax		T_DRAXX-9G	OCGT	15	1973				N/A	Z8	NGET
Drone Hill			Wind	38	2008	-12.5	12.5	178	DRHI30	Z6	SPT
Drumderg Wind (Dalrulzion)	1		Wind	16	2007	-5.3	5.3	90	DRUW81	Z4	SHETL

Drumderg Wind (Dalrulzion)	2		Wind	16	2007	-5.3	5.3	90	DRUW82	Z4	SHETL
Dun Law	1		Wind	29.75	2008	-13.6	15.4	175.8	DUNE30	Z6	SPT
Dunbeath Beatrice Wind	1		Wind	10	2012	-3.3	3.3	49	DUBE8W	Z1	SHETL
Dunbeath Wind	1		Wind	55	2013	-10.9	16	265	DUBE8X	Z1	SHETL
Dungeness B	21	T_DNGB21	Nuclear AGR	541	1985	-286.4	315	2224	DUNG40	Z15	NGET
Dungeness B	22	T_DNGB22	Nuclear AGR	541	1989	-297.8	308.6	2355.6	DUNG40	Z15	NGET
Earlsburn	1		Wind	35	2006	-13.4	14.8	198.8	EARB30	Z6	SPT
Earlshaugh			Wind	108	2010	-35.5	35.5	506	EHAU10	Z6	SPT
Edinbane Wind	1		Wind	42	2008	-26.4	10.5	156	EDIN10	Z1	SHETL
Eggborough	1	T_EGGPS-1	Large Coal	483	1968	-144.6	209.1	1648	EGGB42	Z8	NGET
Eggborough	2	T_EGGPS-2	Large Coal	483	1968	-150.6	217.1	1588.2	EGGB42	Z8	NGET
Eggborough	3	T_EGGPS-3	Large Coal	483	1968	-144.1	164.7	1637.5	EGGB41	Z8	NGET
Eggborough	4	T_EGGPS-4	Large Coal	483	1969	-148.2	184.3	1605.3	EGGB41	Z8	NGET
Eggborough			OCGT		1967				EGGB42	Z8	NGET
Eggborough			OCGT		1968				EGGB41	Z8	NGET
Eishken Estate	1		Wind	300	2014	-98.6	98.6	1110	EISE80	Z1	SHETL
Eredine Forest Wind (Argyll)	1		Wind	30	2008	-9.9	9.9	130	ERED8W	Z3	SHETL
Errochty	1	ERRO-1	Hydro	25		-1.7	10	109	ERRO10	Z4	SHETL
Errochty	2	ERRO-2	Hydro	25		0	12.1	154	ERRO82	Z4	SHETL
Errochty	3	ERRO-3	Hydro	25		-1.7	10	109	ERRO10	Z4	SHETL
Ewe Hill	1		Wind	66	2009	-21.7	21.7	309	EWEH30	Z6	SPT
Exxon Mosmorran	1		CHP	16		0	0	16	MOSM10	Z5	SPT
Fairburn Wind	1		Wind	42	2009	-10.5	10.5	276	FAWI80	Z1	SHETL
Fairwind	1		Wind	126	2013	-41.4	41.4	608	FAIW80	Z1	SHETL
Fallago			Wind	144	2009	-47.3	47.3	675	FALL31	Z6	SPT
Farr Windfarm (Tomatin)	1		Wind	46	2005	-29	1	240	FAAR1Q	Z1	SHETL
Farr Windfarm (Tomatin)	2		Wind	46	2005	-29	1	240	FAAR1R	Z1	SHETL
Fasnakyle	1	FASN-1	Hydro	23		-3	-3	74	FASN10	Z1	SHETL
Fasnakyle	1	FASN-1	Hydro	23		-3	-3	74	FASN10	Z1	SHETL
Fasnakyle	2	FASN-2	Hydro	23		-2.5	-2.5	80	FASN10	Z1	SHETL
Fasnakyle	2	FASN-2	Hydro	23		-2.5	-2.5	80	FASN10	Z1	SHETL
Fasnakyle	3	FASN-3	Hydro	23		-1.6	-1.6	93	FASN10	Z1	SHETL
Fasnakyle	3	FASN-3	Hydro	23		-1.6	-1.6	93	FASN10	Z1	SHETL
Fasnakyle Compensation Hydro (Unit 4)			Hydro	8	2014	0	0	37.4	FASN30	Z1	SHETL
Fawley	1	T_FAWL1	Oil	500	1969	-156.7	199	1603.6	FAWL40	Z16	NGET

Fawley	3	T_FAWL3	Oil	500	1970	-154.3	201.3	1601.4	FAWL40	Z16	NGET
Fawley		T_FAWL1G	OCGT	17	1969				FAWL40	Z16	NGET
Fawley		T_FAWL2G	OCGT	23	1969				FAWL40	Z16	NGET
Fawley		T_FAWL3G	OCGT	17	1970				FAWL40	Z16	NGET
Fawley		T_FAWL4G	OCGT	8	1970				FAWL40	Z16	NGET
Fawley CHP	1		OCGT	158	1999	-90	19.7	368.2	FAWL10	Z16	NGET
Ferrybridge C	1	T_FERR-1	Large Coal	490	1966	-155.3	195.9	1544.2	FERR23	Z8	NGET
Ferrybridge C	2	T_FERR-2	Large Coal	490	1967	-154.8	196.6	1513.9	FERR22	Z8	NGET
Ferrybridge C	3	T_FERR-3	Large Coal	490	1967	-154.2	197.3	1519.4	FERR22	Z8	NGET
Ferrybridge C	4	T_FERR-4	Large Coal	490	1968	-150.5	196.1	1540	FERR23	Z8	NGET
Ferrybridge C		T_FERR-5G	OCGT	10.5					FERR21	Z8	NGET
Ferrybridge C		T_FERR-8G	OCGT	10.5	1967				FERR23	Z8	NGET
Ffestiniog	1	T_FFES-1	Pumped Storage	90	1961	-38.8	21.2	375.6	FFES21	Z9	NGET
Ffestiniog	2	T_FFES-2	Pumped Storage	90		-38.8	21.2	375.6	FFES21	Z9	NGET
Ffestiniog	3	T_FFES-3	Pumped Storage	90	1963	-38.8	21.2	375.6	FFES22	Z9	NGET
Ffestiniog	4	T_FFES-4	Pumped Storage	90		-38.8	21.2	375.6	FFES22	Z9	NGET
Fiddlers Ferry	1	T_FIDL-1	Large Coal	485	1971	-166.6	211.3	1649.6	FIDF21	Z9	NGET
Fiddlers Ferry	2	T_FIDL-2	Large Coal	485	1972	-166.5	213.8	1649.7	FIDF22	Z9	NGET
Fiddlers Ferry	3	T_FIDL-3	Large Coal	485	1972	-172	229.6	1659.7	FIDF23	Z9	NGET
Fiddlers Ferry	4	T_FIDL-4	Large Coal	506	1973	-164.3	120.6	1693.3	FIDF24	Z9	NGET
Fiddlers Ferry		T_FIDL-2G	OCGT		1969				FIDF22	Z9	NGET
Fiddlers Ferry		T_FIDL-3G	OCGT		1970				FIDF23	Z9	NGET
Fife	1	FIFE-1	CCGT	70.5	2000	-49.2	46.2	268	FIFE10	Z5	SPT
Fife	2		CCGT	52.5	2000	-43.4	21	170	FIFE1B	Z5	SPT
Finlarig	1	FINL-1	Hydro	17		-6.2	9.2	108	FINL1Q	Z4	SHETL
Flotta			Gas	10					THSO8E	Z1	SHETL
Foyers	1	FOYE-1	Pumped Storage	150		-103.6	20.3	600	FOYE20	Z1	SHETL
Foyers	2	FOYE-2	Pumped Storage	150		-103.1	20.7	606	FOYE20	Z1	SHETL
Glendoe	1		Hydro	100	2012	-32.9	62	700	FAUG81	Z1	SHETL
Glenmoriston	1		Hydro	18.5		-3.5	9.9	180	GLEN1Q	Z1	SHETL
Glenmoriston	2		Hydro	18.5		0	6.9	75	GLEN80	Z1	SHETL
Glens of Foundland	1		Wind	13	2005	-4.2	4.2	85	GLOF81	Z2	SHETL
Glens of Foundland	2		Wind	13	2005	-4.2	4.2	85	GLOF82	Z2	SHETL
Gordonbush Wind	1		Wind	88	2009	-28.9	28.9	257	STRB20	Z1	SHETL

Grain	1	T_GRAI-1	Oil	650	1982	-237.1	242.4	1800.8	GRAI40	Z15	NGET
Grain	2	T_GRAI-2	Oil	0	1979	-237.1	242.4	1800.8	GRAI40	Z15	NGET
Grain	3	T_GRAI-3	Oil	0	1982	0	0		GRAI40	Z15	NGET
Grain	4	T_GRAI-4	Oil	650	1984	0	0		GRAI40	Z15	NGET
Grain		T_GRAI1G	OCGT	55	1979				GRAI40	Z15	NGET
Grain		T_GRAI2G	OCGT	0	1978				GRAI40	Z15	NGET
Grain		T_GRAI3G	OCGT	0	1979				GRAI40	Z15	NGET
Grain		T_GRAI4G	OCGT	0	1980				GRAI40	Z15	NGET
Grain		T_GRAI5G	OCGT	0	1982				GRAI40	Z15	NGET
Grain Stage 1			CCGT	860	2010	-427	398.1	2238.4	GRAI41	Z15	NGET
Grain Stage 1			CCGT	430	2011	-213.5	199	1119.2	GRAI41	Z15	NGET
Grangemouth CHP	1	BPGRD-1	CHP	120		-84.1	51.2	492	BPGR34	Z6	SPT
Grangemouth CHP	1		CHP			0	0	422	BPGR34	Z6	SPT
Grangemouth CHP	2		CHP			0	12.9	263	BPGR34	Z6	SPT
Grangemouth CHP	2		CHP			0	0	74	BPGR34	Z6	SPT
Grangemouth CHP	3		CHP			0	12.9	263	BPGR34	Z6	SPT
Grangemouth CHP	3		CHP			0	0	190	BPGR34	Z6	SPT
Grangemouth CHP	4		CHP			0	12.9	263	BPGR34	Z6	SPT
Grangemouth CHP	5		CHP			0	12.9	263	BPGR34	Z6	SPT
Grangemouth CHP	6		CHP			0	12.9	263	BPGR34	Z6	SPT
Grangemouth CHP	7		CHP			4	4	261	BPGR34	Z6	SPT
Grangemouth CHP	8		CHP			4	4	261	BPGR34	Z6	SPT
Great Yarmouth	1		CCGT	420	2000	-208.6	184.1	1203.6	NORW10	Z12	NGET
Greater Gabbard			Offshore Wind	500	2009	-164	164		SIZE11/12		NGET
Greenock	1		Wind	0		-21.5	22.9	266.5	GROC30	Z6	SPT
Griffin Windfarm (Aberfeldy)	1		Wind	108	2010	-35.5	35.5	521	GRIF81	Z4	SHETL
Griffin Windfarm (Aberfeldy)	2		Wind	108	2010	-35.5	35.5	521	GRIF82	Z4	SHETL
Grudie Bridge	1		Hydro	11		0	3.2	67	GRUB81	Z1	SHETL
Grudie Bridge	2		Hydro	11		0	0	78	GRUB81	Z1	SHETL
Gwynt Y Mor Stage 1			Offshore Wind	294	2011	-97	97		GWYN40	Z9	NGET
Gwynt Y Mor Stage 2			Offshore Wind	294	2012	-97	97		GWYN40	Z9	NGET
Gwynt Y Mor Stage 3			Offshore Wind	147	2013	-48	48		GWYN40	Z9	NGET

Hadyard Hill	1		Wind	130	2005	-7	-7	635.5	HADH30	Z6	SPT
Harestanes	1		Wind	213	2010	-70	70	967	HARE80	Z6	SPT
Harrows Law	1		Wind	140	2009	-46	46	659.3	HALA80	Z6	SPT
Hartlepool	1	T_HRTL-1	Nuclear AGR	604	1989	-299	258.3	2043.4	HATL20	Z7	NGET
Hartlepool	2	T_HRTL-2	Nuclear AGR	604	1989	-296.8	244.8	2043.4	HATL20	Z7	NGET
Hatfield			IGCC with CCS	800	2011	-564.5	510.5	2616.3	THOB40	Z7	NGET
HearthStanes B Windfarm			Wind	81	2010	-26.6	26.6	379	HEAR30	Z6	SPT
Heysham 1	1	T_HEYM11	Nuclear AGR	607	1989	-289.2	286.3	2224	HEYS40	Z9	NGET
Heysham 1	2	T_HEYM12	Nuclear AGR	596	1989	-288.7	292.6	2196.2	HEYS40	Z9	NGET
Heysham 2	7	T_HEYM27	Nuclear AGR	601	1989	-266.2	269.2	2404.1	HEYS40	Z9	NGET
Heysham 2	8	T_HEYM28	Nuclear AGR	603	1989	-264.6	265.7	2417.9	HEYS40	Z9	NGET
Heysham Offshore Windfarm			Offshore Wind	140	2008	-46	46		HEYS10	Z9	NGET
Hinkley Point B	7	T_HINB-7	Nuclear AGR	644	1978	-248.6	202.8	2023	HINP40	Z17	NGET
Hinkley Point B	8	T_HINB-8	Nuclear AGR	617	1976	-290.8	193.5	2078.5	HINP40	Z17	NGET
Houstary Wind, Dunbeath	1		Wind	14	2004	0	0	49	DUBE3D	Z1	SHETL
Humber Gateway Stage 1			Offshore Wind	220	2011	-72	72		HUMG10	Z9	NGET
Humber Gateway Stage 2			Offshore Wind	80	2011	-26.3	26.3		HUMG10	Z8	NGET
Hunterston	7	HUNB-7	Nuclear AGR	605		-145.9	273.8	1976	HUER40	Z6	SPT
Hunterston	8	HUNB-8	Nuclear AGR	605		-145.4	104.2	1983	HUER40	Z6	SPT
Immingham CHP stage 1			CCGT	244	2004	-122.4	118.5	844	HUMR40	Z8	NGET
Immingham CHP stage 1			CCGT	262	2004	-122.4	118.5	844	HUMR40	Z8	NGET
Immingham CHP stage 1			CCGT	117	2004	-53.5	54.6	439	HUMR40	Z8	NGET
Immingham CHP stage 1			CCGT	117	2004	-53.5	54.6	439	HUMR40	Z8	NGET
Immingham CHP stage 2			CCGT	227	2008	-114	148.1	828.9	HUMR40	Z8	NGET
Immingham CHP stage 2			CCGT	227	2008	-114	148.1	828.9	HUMR40	Z8	NGET
Immingham CHP stage 2			CCGT	106	2008	-52.5	55.6	439	HUMR40	Z8	NGET
Indian Queens	1	T_INDQ-1	OCGT	140	1996	-54.9	115.9	656.3	INDQ40	Z17	NGET
Insch Wind	1		Wind	10	2005	-1.5	1.5	63	KEIT80	Z2	SHETL

Inverawe	1		Hydro	25		-2	-2	72	INAW3Q	Z3	SHETL
Invergarry	1	CAS-GAR01	Hydro	20		-1.6	-1.6	65	INGA1Q	Z1	SHETL
Ironbridge	1	T_IRNPS-1	Large Coal	482	1970	-165.2	208.5	1539.1	IRON40	Z11	NGET
Ironbridge	2	T_IRNPS-2	Large Coal	482	1970	-159.5	206.3	1522.7	IRON40	Z11	NGET
Ironbridge			OCGT		1967				IRON40	Z11	NGET
Ironbridge			OCGT		1967				IRON40	Z11	NGET
Keadby		T_KEAD-1	CCGT	245	1994	-109.5	96.5	772.1	KEAP41	Z8	NGET
Keadby		T_KEAD-1	CCGT	245	1994	-106.2	110.9	805.6	KEAP42	Z8	NGET
Keadby		T_KEAD-1	CCGT	245	1994	-113.7	103.3	781.6	KEAP42	Z8	NGET
Keadby		T_KEADGT3	CCGT						N/A	Z8	NGET
Keadby		T_KEADGT3	CCGT						N/A	Z8	NGET
Keadby		T_KEADGT3	CCGT						N/A	Z8	NGET
Kendoon	1		Hydro	12					KEOO11	Z8	NGET
Kendoon	2		Hydro	12					KEOO11	Z8	NGET
Kilbraur Wind Farm Stage 1	1		Wind	47.5	2007	-12.2	17.9	441	STRB8W	Z1	SHETL
Kilbraur Wind Farm Stage 2	1		Wind	19.5	2009	-12.2	17.9	441	STRB8W	Z1	SHETL
Killingholme 1		T_KILLPG-1	CCGT	0	1992	-69.7	66.9	584.6	KILL40	Z8	NGET
Killingholme 1		T_KILLPG-1	CCGT	0	1992	-68.1	68.7	593.8	KILL40	Z8	NGET
Killingholme 1		T_KILLPG-1	CCGT	0	1992	-73.6	79.6	658.2	KILL40	Z8	NGET
Killingholme 1		T_KILLPG-2	CCGT	0	1992	-69.5	67	587	KILL40	Z8	NGET
Killingholme 1		T_KILLPG-2	CCGT	0	1992	-69.5	67	573.5	KILL40	Z8	NGET
Killingholme 1		T_KILLPG-2	CCGT	0	1992	-73.6	79.6	658.2	KILL40	Z8	NGET
Killingholme 2		T_KILNS-1	CCGT	144.6	1993	-69	57.3	638.2	KILL40	Z8	NGET
Killingholme 2		T_KILNS-1	CCGT	144.6	1993	-69	57.3	637.6	KILL40	Z8	NGET
Killingholme 2		T_KILNS-1	CCGT	144.6	1993	-69	57.3	628.6	KILL40	Z8	NGET
Killingholme 2		T_KILNS-1	CCGT	231.2	1993	-106.7	104.7	773.1	KILL40	Z8	NGET
Kilmorack	1		Hydro	10		-1.8	-1.8	93	KIOR1Q	Z1	SHETL
Kilmorack	2		Hydro	10		0	0	39	KIOR80	Z1	SHETL
Kings Lynn			CCGT	340	1996	-172.8	128.9	1109.5	KINL1A	Z12	NGET
Kings Lynn			CCGT						KLYP11	Z12	NGET
Kings Lynn			CCGT						KLYP11	Z12	NGET
Kingsburn Wind farm, Fintry, Stirling			Wind	20	2009	-6.6	6.6	110	KIBU30	Z5	SHETL
Kingsnorth	1	T_KINO-1	Dual Fuel	485	1970	-131.9	196	1845.4	KINO40	Z15	NGET
Kingsnorth	2	T_KINO-2	Dual Fuel	485	1971	-131.8	196.2	1848.1	KINO40	Z15	NGET
Kingsnorth	3	T_KINO-3	Dual Fuel	485	1972	-128.4	200.7	1897.1	KINO40	Z15	NGET
Kingsnorth	4	T_KINO-4	Dual Fuel	485	1973	-132.5	195.3	1837.9	KINO40	Z15	NGET
Kingsnorth		T_KINO1G	OCGT	13	1967				KINO40	Z15	NGET
Kingsnorth		T_KINO4G	OCGT	13	1967				KINO40	Z15	NGET
Kinlochleven	1		Hydro	10	2001	-3.5	3.4	35	KILO3Q	Z1	SHETL
Kinlochleven	2		Hydro	10	2001	-3.5	3.4	35	KILO3Q	Z1	SHETL

Kinlochleven	3		Hydro	10	2001	-3.5	3.4	35	KILO3Q	Z1	SHETL
Kyle			Wind	300	2010	-98.6	98.6	146	KYLS30	Z6	SPT
Lairg - Achany WF	1		Wind	62	2009	-24.6	32.7	299.5	LAIR3W	Z1	SHETL
Langage stage 1			CCGT	452.5	2008	-196.7	178.5	1259	LANG40	Z17	NGET
Langage stage 1			CCGT	452.5	2008	-196.7	178.5	1259	LANG40	Z17	NGET
Limmer Hill			Wind	80	2010	-26.3	26.3	394	LIMM30	Z6	SPT
Lincs Offshore Wind Farm			Offshore Wind	250	2009	-82	82		WALP40	Z12	NGET
Little Barford		T_LBAR-1	CCGT	210	1994	-109.5	90.1	713.1	LITB40	Z12	NGET
Little Barford		T_LBAR-1	CCGT	210	1994	-109.2	90.3	715.3	LITB40	Z12	NGET
Little Barford		T_LBAR-1	CCGT	245	1994	-117.4	115.7	794.2	LITB40	Z12	NGET
Little Barford B			CCGT	475	2012	-242.7	232.8	1238.5	LITB40	Z12	NGET
Littlebrook D	1	T_LITTD1	Oil	685	1982	-261.2	264	1797	LITT40	Z14	NGET
Littlebrook D	2	T_LITTD2	Oil	685	1983	-260.8	264.5	1801.4	LITT40	Z14	NGET
Littlebrook D	3	T_LITTD3	Oil	0	1984	0	0	1799.4	LITT40	Z14	NGET
Littlebrook D		T_LITTD1G	OCGT	35	1980				LITT40	Z14	NGET
Littlebrook D		T_LITTD2G	OCGT	35	1981				LITT40	Z14	NGET
Littlebrook D		T_LITTD3G	OCGT	35	1982				LITT40	Z14	NGET
Livishie	1		Hydro	15		0	0	96	LIVI80	Z1	SHETL
Lochay	1		Hydro	22.5		-2	-2	71	LOCH10	Z4	SHETL
Lochay	2		Hydro	22.5		-1.9	-1.9	71	LOCH10	Z4	SHETL
London Array Stage 1			Offshore Wind	200	2010	-66	66	766	CLEV11/2/3/4/5	Z15	NGET
London Array Stage 2			Offshore Wind	800	2010	-263	263	3064	CLEV11/2/3/4/5	Z15	NGET
Longannet	1	LOAN-1	Large Coal	576		-230	118	2313	LOAN20	Z5	SPT
Longannet	2	LOAN-1	Large Coal	576		-230	118	1848	LOAN20	Z5	SPT
Longannet	3	LOAN-2	Large Coal	576		-228	120	2313	LOAN20	Z5	SPT
Longannet	4	LOAN-2	Large Coal	576		-230	120	1848	LOAN20	Z5	SPT
Longannet	5	LOAN-3	Large Coal	576		-209.5	232.9	2321	LOAN20	Z5	SPT
Longannet	6	LOAN-3	Large Coal	288		-54	185.9	1848	LOAN20	Z5	SPT
Longannet	7	LOAN-4	Large Coal	576		-210	232.2	2313	LOAN20	Z5	SPT
Longannet	8	LOAN-4	Large Coal	288		-54	185.9	1848	LOAN20	Z5	SPT
Longpark			Wind	38	2009	-12.5	12.5	178	LOPA30	Z6	SPT
Lubreoch	1		Hydro			-1.2	-1.2	17	LUBR30	Z1	SHETL
Luichart	1		Hydro	17		-1.1	-1.1	72	LUIC1Q	Z1	SHETL
Luichart	2		Hydro	17		-1.1	-1.1	72	LUIC1R	Z1	SHETL
Lynemouth	1		Small Unit Coal	131	1971	-72	28	64.7	ALCA10	Z7	NGET

Lynemouth	2		Small Unit Coal	131	1971	-72	28	64.7	ALCA10	Z7	NGET
Lynemouth	3		Small Unit Coal	131	1971	-72	28	64.7	ALCA10	Z7	NGET
Lynes Common			OCGT	49.9						Z16	NGET
Marchwood	1		CCGT	324	2008	-138.2	133.8	957.2	MAWO40	Z16	NGET
Marchwood	2		CCGT		2008				MAWO40	Z16	NGET
Marchwood	3		CCGT	324	2008	-138.2	133.8	957.2	MAWO40	Z16	NGET
Marchwood	4		CCGT		2008				MAWO40	Z16	NGET
Marchwood	5		CCGT	288	2008	-134.2	114.9	869.5	MAWO40	Z16	NGET
Margree			Wind	70	2013	-23	23	328	MARG30	Z6	SPT
Mark's Hill	1		Wind	99	2008	-32.5	32.5	501	MAHI80	Z6	SPT
Medway		T_MEDP-1	CCGT	226.7	1995	-120.1	109.1	695.5	MEDW40	Z15	NGET
Medway		T_MEDP-1	CCGT	226.7	1995	-118.9	110.9	696.1	MEDW40	Z15	NGET
Medway		T_MEDP-1	CCGT	226.7	1995	-112.6	121.3	694	MEDW40	Z15	NGET
Mid Hill Wind (Stonehaven)	1		Wind	75	2012	-24	24	362	MIHW8W	Z2	SHETL
Millennium Wind (Ceannacroc) Stage 1	1		Wind	40	2007	-13	13	185	MILW1Q	Z1	SHETL
Millennium Wind (Ceannacroc) Stage 2	1		Wind	10	2008	-3.3	3.3	185	MILW1Q	Z1	SHETL
Millennium Wind (Ceannacroc) Stage 3	1		Wind	15	2009	-4.9	4.9	185	MILW1Q	Z1	SHETL
Minsca, Risp Hill	1		Wind	38	2007	-1.6	-1.6	149.8	MINS80	Z6	SPT
Montreathmont Moor Wind	1		Wind	40	2013	-13.1	13.1	193	MOMW80	Z2	SHETL
Mossford			Hydro	18.66						Z1	SHETL
Nant, Loch Nant Hydro	1		Hydro	15		-5.6	4	42	LOCN1Q	Z1	SHETL
Neilston			Wind	100	2012	-32.9	32.9	469	NEIW30	Z6	SPT
Newfield			Wind	60	2009	-19.7	19.7	281	NEWF30	Z6	SPT
North Nesting Wind (DC link from Shetland)	1		Wind	125	2014	-41.1	41.1		NNEW81	Z1	SHETL
North Nesting Wind (DC link from Shetland)	2		Wind	125	2014	-41.1	41.1		NNEW82	Z1	SHETL
Novar	1		Wind	19		-1	-1	85	NOVA80	Z1	SHETL
Novar stage 2	1		Wind	32	2014	-10.5	10.5	79	NOVA30	Z1	SHETL
Oldbury	1	T_OLDS1	Nuclear Magnox	228	1967	-118.1	153.7	1150	OLDS11	Z13	NGET
Oldbury	2	T_OLDS2	Nuclear Magnox	242	1968	-108.8	148.6	1154.6	OLDS12	Z13	NGET
Orrin	1		Hydro	18		-1.6	-1.6	67	ORRI1R	Z1	SHETL
Pairc (South Lochs) Wind	1		Wind	125	2013	-120	120	925	PARW81	Z1	SHETL

Pairc (South Lochs) Wind (DC link from Western Isles)	2		Wind	125	2013	-41.1	41.1		PARW82	Z1	SHETL
Paul's Hill, Aberlour	1		Wind	56	2005	-13	13	304	PAUH80	Z1	SHETL
Pembroke 1 Stage 1			CCGT	800	2009	-394.9	357.6	2325.9	PEMB40	Z13	NGET
Pembroke 1 Stage 2			CCGT	1200	2009	-592.4	536.4	3488.8	PEMB40	Z13	NGET
Pembroke 2 Stage 1			CCGT	1200	2013	-592.4	536.4	3488.8	PEMB40	Z13	NGET
Pembroke 2 Stage 2			CCGT	800	2014	-394.9	357.6	2325.9	PEMB40	Z13	NGET
Pencloe			Wind	63	2009	-20.7	20.7	295	PENC30	Z6	SPT
Pentland Road Wind, Lewis (DC link from Western Isles)	1		Wind	13	2013	-4.3	4.3		PERW	Z1	SHETL
Peterborough			CCGT		1993	-72.1	53.6	449.1	WALP11	Z12	NGET
Peterborough			CCGT		1993	-72.1	53.6	449.1	WALP13	Z12	NGET
Peterborough			CCGT	405	1993	-82.2	66.9	449.1	WALP11	Z12	NGET
Peterhead	1		CCGT	660		-134.6	291.8	1789	PEHE2S	Z2	SHETL
Peterhead	2		Dual Fuel Oil/ Gas	660		-135	291.2	1786	PEHE2T	Z2	SHETL
Peterhead	3		OCGT	120.5		-72.3	66.2	523	PEHE12	Z2	SHETL
Peterhead	4		OCGT	120.5		-72.5	66	520	PEHE13	Z2	SHETL
Peterhead	11		CCGT	266		-125.1	118	834	PEHE2U	Z2	SHETL
Peterhead	12		CCGT	266		-125.1	118	834	PEHE2V	Z2	SHETL
Peterhead	13		CCGT	266		-125.1	118	834	PEHE2W	Z2	SHETL
Pitlochry			Hydro	15						Z3	SHETL
Port Talbot			Woodchip	350	2011	-114	214	1248	MAGA20	Z13	NGET
Quoich	1		Hydro	18		-1.1	4.7	75	QUOI10	Z1	SHETL
Race Bank			Offshore Wind	500	2013	-164.3	164.3		WALP40	Z12	NGET
Rannoch	1		Hydro	14.7		0	32.7	1024	RANN81	Z4	SHETL
Rannoch	2		Hydro	14.7		0	10.9	114	RANN81	Z4	SHETL
Rannoch	3		Hydro	14.7		0	10.9	114	RANN81	Z4	SHETL
Ratcliffe on Soar	1	T_RATS-1	Large Coal	500	1968	-148.1	170	1599.9	RATS41	Z11	NGET
Ratcliffe on Soar	2	T_RATS-2	Large Coal	500	1969	-129.3	193.2	1812.7	RATS41	Z11	NGET
Ratcliffe on Soar	3	T_RATS-3	Large Coal	500	1969	-129.3	193.1	1811	RATS42	Z11	NGET
Ratcliffe on Soar	4	T_RATS-4	Large Coal	500	1970	-79.5	177.6	1660	RATS42	Z11	NGET
Ratcliffe on Soar			OCGT	0	1966				RATS41	Z11	NGET
Ratcliffe on Soar		T_RATSGT-2	OCGT	10	1967				RATS41	Z11	NGET

Ratcliffe on Soar			OCGT	0	1967				RATS42	Z11	NGET
Ratcliffe on Soar		T_RATGT-4	OCGT	11	1968				RATS42	Z11	NGET
Rhigos			Wind	299	2011	-98.3	98.3			Z13	NGET
Rocksavage	1	T_ROCK-1	CCGT	249	1997	-156.8	176.2	1427.2	ROCK40	Z9	NGET
Rocksavage	2	T_ROCK-1	CCGT	249	1997	-156.8	176.2	1427.2	ROCK40	Z9	NGET
Rocksavage	3	T_ROCK-1	CCGT	250	1997	-151	179	1427.2	ROCK40	Z9	NGET
Roosecote			CCGT	169	1991	-75.9	77	696.3	ROOS10	Z9	NGET
Roosecote			CCGT	60	1991	-25.9	34.6	242.5	ROOS10	Z9	NGET
Rothes Biopower Plant			Biomass	52	2008			251.6	ROBP3A	Z5	SPT
Rugeley B	6	T_RUGPS-6	Large Coal	498	1972	-149.6	190.1	1633.3	RUGE40	Z11	NGET
Rugeley B	7	T_RUGPS-7	Large Coal	498	1972	-148.6	191.3	1638.5	RUGE40	Z11	NGET
Rugeley B		T_RUGGT-6	OCGT	22	1969				RUGE40	Z11	NGET
Rugeley B		T_RUGGT-7	OCGT	0	1969				RUGE40	Z11	NGET
Rye House		T_RYHPS-1	CCGT	178	1993	-68.2	66.1	505.1	RYEH40	Z14	NGET
Rye House		T_RYHPS-1	CCGT	178	1993	-66.4	68.3	523.9	RYEH40	Z14	NGET
Rye House		T_RYHPS-1	CCGT	178	1993	-68.3	66	504.1	RYEH40	Z14	NGET
Rye House		T_RYHPS-1	CCGT	295	1993	-121.1	78.6	822.9	RYEH40	Z14	NGET
Saltend		T_SCCL-1	CCGT	367	1999	-197.8	173.9	1209.5	SAES20	Z8	NGET
Saltend		T_SCCL-2	CCGT	367	1999	-197.8	173.9	1209.5	SAES20	Z8	NGET
Saltend		T_SCCL-3	CCGT	367	1999	-197.8	173.9	1209.5	SAES20	Z8	NGET
Scunthorpe	1		CCGT	98	2007	-40	51	697.3	BRIG10	Z8	NGET
Scunthorpe	2		CCGT	98	2007	-40	51	689.7	BRIG10	Z8	NGET
Scunthorpe	3		CCGT	98	2007	-42.6	47.7	525.6	BRIG10	Z8	NGET
Seabank		T_SEAB-1	CCGT	273.3	1998	-130.7	95.5	1080.8	SEAB40	Z13	NGET
Seabank		T_SEAB-1	CCGT	273.3	1998	-130.7	95.5	1080.8	SEAB40	Z13	NGET
Seabank		T_SEAB-2	CCGT	414	2000	-210.1	136.8	1345.4	SEAB40	Z13	NGET
Seabank		T_SEAB-1	CCGT	273.3	1998	-122	110.2	1080.8	SEAB40	Z13	NGET
Sellafield CHP			CCGT	37	1993	-18.9	22.7	170.3	SEFI10	Z9	NGET
Sellafield CHP			CCGT	37	1993	-20	19.2	189.1	SEFI10	Z9	NGET
Sellafield CHP			CCGT	37	1993	-20	19.2	170.4	SEFI10	Z9	NGET
Sellafield CHP			CCGT	44	1993	-21.2	28.2	240.4	SEFI10	Z9	NGET
Severn Power Stage 1			CCGT	425	2009	-208.1	193.3	1087	USKM20	Z13	NGET
Severn Power Stage 2			CCGT	425	2010	-208.1	193.3	1087	USKM20	Z13	NGET
Sheringham Shoal			Offshore Wind	315	2010	-103.5	103.5		NORW40	Z12	NGET
Shin			Hydro	18.62						Z1	SHETL
Shira			Wind	52	2012	-17.1	17.1	229	SHRA30	Z4	SHETL
Shoreham			CCGT	420	2000	-225.5	219.1	1072.3	SERX10	Z16	NGET
Shotton			CCGT	70	2001	-54.5	53.3	297.3	SHOT10	Z9	NGET
Shotton			CCGT	70	2001	-54.4	54.2	296.6	SHOT10	Z9	NGET

Shotton			CCGT	70	2001	-52.6	56.7	295.7	SHOT10	Z9	NGET
Sizewell B	3	T_SIZB-1	Nuclear PWR	600	1994	-289.2	287.3	2140.8	SIZE40	Z12	NGET
Sizewell B	4	T_SIZB-2	Nuclear PWR	600	1994	-281.8	286.2	2133.9	SIZE40	Z12	NGET
Sloy	1	SLOY-1	Hydro	33		-11.8	8.9	101	SLOY13	Z3	SHETL
Sloy	2	SLOY-2	Hydro	40		-11.8	8.9	102	SLOY14	Z3	SHETL
Sloy	3	SLOY-3	Hydro	40		-11.4	9.3	101	SLOY15	Z3	SHETL
Sloy	4	SLOY-4	Hydro	40		-11.6	15.6	100	SLOY16	Z3	SHETL
South Humber Bank		T_SHBA-1	CCGT	169	1996	-76	76.9	636.9	SHBA40	Z8	NGET
South Humber Bank		T_SHBA-1	CCGT	169	1996	-80.4	70.8	636	SHBA40	Z8	NGET
South Humber Bank		T_SHBA-1	CCGT	169	1996	-81.3	69.2	637.5	SHBA40	Z8	NGET
South Humber Bank		T_SHBA-1	CCGT	262	1996	-126.8	119.5	752.4	SHBA40	Z8	NGET
South Humber Bank		T_SHBA-2	CCGT	174	1998	-79.2	68.1	658.2	SHBA40	Z8	NGET
South Humber Bank		T_SHBA-2	CCGT	174	1998	-79.3	68	657.3	SHBA40	Z8	NGET
South Humber Bank		T_SHBA-2	CCGT	168	1998	-77.8	80.7	625.6	SHBA40	Z8	NGET
Spalding		T_SPLN-1	CCGT	252	2004	-186.5	141.4	843.9	SPLN40	Z10	NGET
Spalding		T_SPLN-1	CCGT	252	2004	-185	146.5	843.9	SPLN40	Z10	NGET
Spalding		T_SPLN-1	CCGT	366	2004	-242.3	231.7	904.5	SPLN40	Z10	NGET
St Fillians	1		Hydro	17		-2	7.7	71	SFIL1Q	Z4	SHETL
Stacain Wind Farm, Sron Mor, Inveraray			Wind	42	2012	-13.8	13.8	188	STAC30	Z4	SHETL
Staythorpe C stage 1			CCGT	425	2009	-215.4	303.4	1143.5	STAY41	Z10	NGET
Staythorpe C stage 2			CCGT	425	2009	-215.4	303.4	1143.5	STAY41	Z10	NGET
Staythorpe C stage 3			CCGT	425	2009	-215.4	303.4	1143.5	STAY42	Z10	NGET
Staythorpe C stage 4			CCGT	425	2009	-215.4	303.4	1143.5	STAY42	Z10	NGET
Steven's Croft	1		Biomass	45	2006	-14.2	12.4	175.2	STCR80	Z6	SPT
Stoneywood Mills	1		CHP	12		0	0		STOM30	Z2	SHETL
Strathy Wind	1		Wind	75.3	2012	-19.8	19.8	330	STRW81	Z1	SHETL
Strathy Wind	1		Wind	75.3	2012	-22.9	22.9	382	STRW82	Z1	SHETL
Strathy Wind	1		Wind	75.3	2012	-24.8	24.8	365	STRW34	Z1	SHETL
Stroupster Wind	1		Wind	32	2014	-10.5	10.5	118	THSO30	Z1	SHETL
Sutton Bridge	1	T_SUTB-1	CCGT	266.7	1998	-131.1	94.9	886.8	SUTB4A	Z12	NGET
Sutton Bridge	2	T_SUTB-1	CCGT	266.7	1998	-131.1	94.9	886.8	SUTB4A	Z12	NGET
Sutton Bridge	3	T_SUTB-1	CCGT	266.6	1998	-122.6	119.7	886.8	SUTB4A	Z12	NGET
Sutton Bridge B			CCGT	1305	2013	-678	552.1	3424.7	SUTB4A	Z12	NGET

Tangy	1		Wind	13	2002	-3	-3	96	TANG80	Z3	SHETL
Taylors Lane	2	E_TAYL2G	OCGT	72	1981	-28.9	29.6	317.5	WISD10	Z14	NGET
Taylors Lane	3	E_TAYL3G	OCGT	72	1979	-29.9	27.9	325	WISD10	Z14	NGET
Teesport			ICGCCT	925	2014	-442.8	418	4346.8	TEEP40	Z7	NGET
Teesside		T_TESI-1	CCGT	153.5	1992	-74.8	42.3	556.6	GRST21	Z7	NGET
Teesside		T_TESI-1	CCGT	153.5	1992	-74.9	42.1	556.6	GRST21	Z7	NGET
Teesside		T_TESI-1	CCGT	153.5	1992	-74.9	42.1	556.6	GRST21	Z7	NGET
Teesside		T_TESI-1	CCGT	153.5	1992	-75.1	41.9	556.6	GRST21	Z7	NGET
Teesside		T_TESI-1	CCGT	153.5	1992	-166.1	129.4	1197.8	GRST21	Z7	NGET
Teesside		T_TESI-2	CCGT	153.5	1992	-74.8	42.3	556.6	GRST22	Z7	NGET
Teesside		T_TESI-2	CCGT	153.5	1992	-75.1	41.9	556.6	GRST22	Z7	NGET
Teesside		T_TESI-2	CCGT	153.5	1992	-74.8	42.3	556.6	GRST22	Z7	NGET
Teesside		T_TESI-2	CCGT	153.5	1992	-74.9	42.1	556.6	GRST22	Z7	NGET
Teesside		T_TESI-2	CCGT	323.5	1992	-166.6	128.7	1197.8	GRST22	Z7	NGET
Teesside		T_TESI-2	CCGT	323.5	1992	-166.6	128.7	1197.8	GRST22	Z7	NGET
Thanet Offshore Windfarm			Offshore Wind	300	2009	-98.6	98.6		CANT11/2	Z15	NGET
Tilbury B	7	T_TILB-7	Medium Coal	0	1968	0	0	1295.8	TILB21	Z15	NGET
Tilbury B	8	T_TILB-8	Medium Coal	350	1972	-114.9	108.3	1300.7	TILB21	Z15	NGET
Tilbury B	9	T_TILB-9	Medium Coal	350	1972	-113.5	110	1320.6	TILB22	Z15	NGET
Tilbury B	10	T_TILB-10	Medium Coal	350	1970	-111.3	120.8	1262	TILB22	Z15	NGET
Tilbury B		T_TILB-10G	OCGT	0	1965				TILB22	Z15	NGET
Tilbury B		T_TILB-7G	OCGT	0	1965				TILB21	Z15	NGET
Tilbury B		T_TILB-8G	OCGT	13	1965				TILB21	Z15	NGET
Tilbury B		T_TILB-9G	OCGT	13	1965				TILB22	Z15	NGET
Toddleburn	1		Wind	36	2009	-14	15	175.8	TODD80	Z6	SPT
Tomatin Wind	1		Wind	30	2012	-9.8	9.8	145	TOMW8W	Z1	SHETL
Tongland	1		Hydro	11					TONG80	Z6	SPT
Tongland	2		Hydro	11					TONG80	Z6	SPT
Tongland	3		Hydro	11					TONG80	Z6	SPT
Tormywheel			Wind	32	2009	-10.5	10.5	152	TORM3A/3B	Z6	SPT
Torness	1	TORN-1	Nuclear AGR	600		-272.5	296.9	1769.2	TORN40	Z6	SPT
Torness	2	TORN-2	Nuclear AGR	600		-272.5	296.9	1769.2	TORN40	Z6	SPT
Torr Achilty			Hydro	15						Z1	SHETL
Tullo Wind, Laurencekirk	1		Wind	14	2007	-4.6	4.6	75	BRID30	Z1	SHETL
Tummel Bridge	1		Hydro	17		0	0	475	TUMB81	Z4	SHETL
Tummel Bridge	2		Hydro	17		0	0	119	TUMB81	Z4	SHETL
Ulzieside			Wind	69	2010	-22.7	22.7	323	ULZI30	Z6	SPT
Uskmouth	1	T_USKM-13	Small Unit Coal	121	2000	-66.8	54	513.8	USKM10	Z13	NGET

Uskmouth	2	T_USKM-14	Small Unit Coal	121	2000	-66.8	54	513.8	USKM10	Z13	NGET
Uskmouth	3	T_USKM-15	Small Unit Coal	121	2000	-66.8	54	513.8	USKM10	Z13	NGET
Waterhead Moor	1		Wind	120	2009	-47.4	49.2	527.4	WAMR30	Z6	SPT
West Burton	1	T_WBUPS-1	Large Coal	483	1967	-176.1	202	1537.9	WBUR40	Z10	NGET
West Burton	2	T_WBUPS-2	Large Coal	503	1967	-178.8	166.1	1533	WBUR40	Z10	NGET
West Burton	3	T_WBUPS-3	Large Coal	503	1967	-179.1	165.8	1530.5	WBUR40	Z10	NGET
West Burton	4	T_WBUPS-4	Large Coal	483	1968	-176.6	201.4	1533.4	WBUR40	Z10	NGET
West Burton		T_WBUGT-1	OCGT	7.5	1966				WBUR40	Z10	NGET
West Burton			OCGT		1966				WBUR40	Z10	NGET
West Burton			OCGT		1967				WBUR40	Z10	NGET
West Burton		T_WBUGT-1	OCGT	7.5	1968				WBUR40	Z10	NGET
West Burton B Stage 1			CCGT	435	2009	-226	184.1	1141.6	WBUR40	Z10	NGET
West Burton B Stage 2			CCGT	870	2010	-452	368.1	2283.1	WBUR40	Z10	NGET
Whitelee	1		Wind	75.9	2007	-36.9	39.2	482.8	WHIL8A	Z6	SPT
Whitelee	2		Wind	218.5	2008	-36.9	39.2	482.8	WHIL8B	Z6	SPT
Whitelee	3		Wind	28.6	2009	-36.9	39.2	482.8	WHIL8C	Z6	SPT
Whiteside Hill			Wind	27	2010	-8.9	8.9	126	WHLL30	Z6	SPT
Wilton			CCGT	38	2006				WILT2	Z7	NGET
Wilton			CCGT	12	2007				WILT2	Z7	NGET
Windy Standard 2	1		Wind	60	2010	-23.7	24.6	263.7	WIST30	Z6	SPT
Wylfa	1	WYLF-1	Nuclear Magnox	245	1971	-117.2	137.3	1025.4	WYLF40	Z9	NGET
Wylfa	2	WYLF-2	Nuclear Magnox	245	1971	-115.9	133.8	997.7	WYLF40	Z9	NGET
Wylfa	3	WYLF-3	Nuclear Magnox	245	1971	-114.8	132.8	1025.4	WYLF40	Z9	NGET
Wylfa	4	WYLF-4	Nuclear Magnox	245	1971	-110.7	135.6	1039.2	WYLF40	Z9	NGET

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Table 3.7 - Changes in Power Station Capacity (TEC (MW)), from 2000/01 to 2014/15

Station Name	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Licensee	Plant Type	SYS Study Zone	Background
Coryton	880				-160		23	57								NGET	CCGT	Z15	E
Damhead Creek	805															NGET	CCGT	Z15	E
Seabank 2	422															NGET	CCGT	Z13	E
Great Yarmouth	420															NGET	CCGT	Z12	E
Shoreham	400				20											NGET	CCGT	Z16	E
CDCL	400				-5											NGET	CCGT	Z10	E
Uskmouth	363															NGET	Small Unit Coal	Z13	E
BP Grangemouth	120															SPT	CHP	Z6	E
Fife Energy Stage 2	60															SPT	CHP	Z5	E
Shotton		215			-5											NGET	CHP	Z9	E
Beinn an Turic Wind (SRO)		30.4														SHETL	Wind	Z4	E
Kinlochleven		30														SHETL	Hydro	Z1	E
Deucheran Hill		15														SHETL	Wind	Z4	E

Baglan Bay			552													NGET	CCGT	Z13	E
Moyle Interconnector (Import)			80													SPT	Interconnector	Z6	E
Tangy (1) Wind, Argyll			13													SHETL	Wind	Z4	E
Crystal Rig 1				49	13.5											SPT	Wind	Z6	E
Spalding					870											NGET	CCGT	Z10	E
Immingham Stage 1					740	-21										NGET	CHP	Z8	E
Braes of Doune					74											SHETL	Wind	Z4	E
Paul's Hill Wind					56	14										SHETL	Wind	Z1	E
Cairn Uish Wind, Rothes					50.6											SHETL	Wind	Z1	E
Lynes Common					49.9											NGET	OCGT	Z16	E
Causeymire					48.3											SHETL	Wind	Z1	E
Cruach Mhor					29.8											SHETL	Wind	Z3	E
Beinn Tharsuinn					29											SHETL	Wind	Z1	E
Boulfrich Wind, Dunbeath					14											SHETL	Wind	Z1	E
Black Law						134										SPT	Wind	Z6	E
Hadyard Hill						130										SPT	Wind	Z6	E
Farr Wind Farm, Tomatin						92										SHETL	Wind	Z1	E
Glens of Foudland Wind (SRO)						26										SHETL	Wind	Z2	E
Boyndie Wind						14.3										SHETL	Wind	Z2	E
Dummuies Windfarm, Insch						10.4										SHETL	Wind	Z2	E
Boyndie Wind (Add. Cap.)						7										SHETL	Wind	Z2	E
Wilton							38	12								NGET	CCGT	Z7	E
Earlsburn							35									SPT	Wind	Z5	E
Ark Hill Wind Farm, Glamis (SRO)							12									SHETL	Wind	Z3	E
Tangy (Add. Cap.)							6									SHETL	Wind	Z4	E
Whitelee Stage 1								75.9								SPT	Wind	Z6	UC

Kilbraur Wind Farm Stage 1								47.5								SHETL	Wind	Z1	UC
Stevens Croft								45								SPT	Biomass	Z6	E
Millenium Wind, Ceannacroc Stage 1								40								SHETL	Wind	Z1	UC
Minsca								37.5								SPT	Wind	Z6	UC
Drumderg Wind Farm, Dalrulzion								32								SHETL	Wind	Z3	UC
Dalswinton								30								SPT	Wind	Z6	UC
Ben Aketil Wind								21								SHETL	Wind	Z1	UC
Tullo Wind Farm, Laurencekirk								13.5								SHETL	Wind	Z2	UC
Ben Aketil Wind (Add. Cap.)								7								SHETL	Wind	Z1	UC
Langage									905							NGET	CCGT	Z17	UC
Marchwood									900							NGET	CCGT	Z16	UC
Immingham Stage 2									601							NGET	CHP	Z8	UC
Whitelee Stage 2									218.5							SPT	Wind	Z6	UC
Heysham Offshore Wind Farm									140							NGET	Offshore Wind	Z9	C
Mark's Hill									99							SPT	Wind	Z6	SYS
Aikengall									48							SPT	Wind	Z6	SYS
An Suidhe									30							SHETL	Wind	Z4	UC
Ardkinglas, Clachan (SRO)									19.3							SHETL	Wind	Z4	UC
Millenium Wind, Ceannacroc Stage 2									10							SHETL	Wind	Z1	UC
Drakelow D										1230						NGET	CCGT	Z11	SYS
Pembroke 1 Stage 2										1200						NGET	CCGT	Z13	SYS
Staythorpe C Stage 3										850						NGET	CCGT	Z10	UC
Pembroke 1 Stage 1										800						NGET	CCGT	Z13	SYS

Clyde										519						SPT	Wind	Z6	SYS
Greater Gabbard Offshore Wind Farm										500						NGET	Offshore Wind	Z12	C
West Burton B Stage 1										435						NGET	CCGT	Z10	UC
Severn Power Stage 1										425						NGET	CCGT	Z13	UC
Staythorpe C Stage 1										425						NGET	CCGT	Z10	UC
Staythorpe C Stage 2										425						NGET	CCGT	Z10	UC
Thanet										300						NGET	Offshore Wind	Z15	SYS
Lincs Offshore Wind Farm										250						NGET	Offshore Wind	Z12	SYS
Crystal Rig 2										200						SPT	Wind	Z6	C
Arecleoch										150						SPT	Wind	Z6	SYS
Fallago										144						SPT	Wind	Z6	SYS
Gordonbush Wind										87.5						SHETL	Wind	Z1	SYS
Lairg - Achany Wind Farm										62						SHETL	Wind	Z1	SYS
Fairburn Wind Farm										42						SHETL	Wind	Z1	SYS
Edinbane Wind, Skye										42						SHETL	Wind	Z1	C
Longpark										38						SPT	Wind	Z6	C
Toddleburn										36						SPT	Wind	Z6	C
Tormywheel										32.4						SPT	Wind	Z6	C
Dun Law extension										29.8						SPT	Wind	Z6	C
Whitelee Stage 3										28.6						SPT	Wind	Z6	UC
Ballindalloch Muir Wind Farm, Balfron										20.8						SHETL	Wind	Z3	SYS
Kingsburn Wind farm, Fintry, Stirling										20						SHETL	Wind	Z4	SYS
Akron Wind (Caithness)										20						SHETL	Wind	Z1	SYS
Kilbraur Wind Farm Stage 2										19.5						SHETL	Wind	Z1	UC

Millenium Wind, Ceannacroc Stage 3										15						SHETL	Wind	Z1	UC
Netherlands Interconnector Stage 1										0						NGET	Interconnector	Z15	UC
Grain Stage 1											860					NGET	CCGT	Z15	UC
Netherlands Interconnector Stage 2											800					NGET	Interconnector	Z15	UC
London Array Stage 2											800					NGET	Offshore Wind	Z15	SYS
Netherlands Interconnector Stage 3											520					NGET	Interconnector	Z15	UC
West Burton B Stage 2											435					NGET	CCGT	Z10	UC
West Burton B Stage 3											435					NGET	CCGT	Z10	UC
Severn Power Stage 2											425					NGET	CCGT	Z13	UC
Sheringham Shoal											315					NGET	Offshore Wind	Z12	SYS
Griffin Windfarm											216					SHETL	Wind	Z3	SYS
Harestanes											213					SPT	Wind	Z6	C
London Array Stage 1											200					NGET	Offshore Wind	Z15	SYS
Earlshaugh											108					SPT	Wind	Z6	SYS
HearthStanes B Windfarm											81					SPT	Wind	Z6	SYS
Limmer Hill											80					SPT	Wind	Z6	SYS
Carraig Gheal (Fernoch)											60					SHETL	Wind	Z4	SYS
Rothes Biopower Plant											52					SPT	Biomass	Z5	SYS
Auchencorth											45					SPT	Wind	Z6	SYS
Andershaw											45					SPT	Wind	Z6	SYS
Drone Hill											37.8					SPT	Wind	Z6	SYS
Barmoor											30					SPT	Wind	Z6	SYS
Brine Field												1020				NGET	CCGT	Z7	SYS
Hatfield												800				NGET	IGCC with CCS	Z8	SYS

East-West Interconnector Project												500				NGET	Interconnector	Z9	SYS
Docking Shoal Wind Farm Ltd												500				NGET	Offshore Wind	Z12	SYS
Grain Stage 2												430				NGET	CCGT	Z15	UC
Port Talbot												350				NGET	Biomass	Z13	SYS
Kyle												300				SPT	Wind	Z6	SYS
Humber Gateway												300				NGET	Offshore Wind	Z8	SYS
Rhigos												299				NGET	Wind	Z13	SYS
Gwynt Y Mor Stage 1												294				NGET	Offshore Wind	Z9	SYS
Harrows Law												140				SPT	Wind	Z6	SYS
Waterhead Moor												120				SPT	Wind	Z6	SYS
Dersalloch												69				SPT	Wind	Z6	SYS
Ewe Hill												66				SPT	Wind	Z6	SYS
Newfield												60				SPT	Wind	Z6	SYS
Causeymire Phase 2												6.9				SHETL	Wind	Z1	C
Little Barford B													475			NGET	CCGT	Z12	SYS
Gwynt Y Mor Stage 2													294			NGET	Offshore Wind	Z9	SYS
Amlwch													270			NGET	CCGT	Z9	SYS
Strathy North & South Wind													226			SHETL	Wind	Z1	SYS
Glendoe, Fort Augustus													100			SHETL	Hydro	Z1	UC
Neilston													100			SPT	Wind	Z6	SYS
Berry Burn Windfarm													82.5			SHETL	Wind	Z1	SYS
Afton													77			SPT	Wind	Z6	SYS
Mid Hill Wind, Stonehaven													75			SHETL	Wind	Z2	SYS
Ulzieside													69			SPT	Wind	Z6	SYS
Pencloe													63			SPT	Wind	Z6	SYS
Beinn an Turic 2													60			SHETL	Wind	Z4	SYS
Windy Standard 2													60			SPT	Wind	Z6	C
Shira													52			SHETL	Wind	Z4	SYS

Stacain Wind Farm, Sron Mor, Inveraray													42			SHETL	Wind	Z4	SYS
Black Craig 40MW Windfarm, Dunoon													40			SHETL	Wind	Z3	SYS
Tomatin Windfarm													30			SHETL	Wind	Z1	SYS
Whiteside Hill													27			SPT	Wind	Z6	C
Beatrice													10			SHETL	Wind	Z1	SYS
Sutton Bridge B														1305		NGET	CCGT	Z12	SYS
Pembroke 2 Stage 1														1200		NGET	CCGT	Z13	SYS
Race Bank Wind Farm														500		NGET	Offshore Wind	Z12	SYS
Pairc (South Lochs) Wind, Lewis														250		SHETL	Wind	Z1	SYS
Gwynt Y Mor Stage 3														147		NGET	Offshore Wind	Z9	SYS
Fairwind (Orkney) Ltd														126		SHETL	Wind	Z1	SYS
Clashindarroch Wind, Huntly														112.7		SHETL	Wind	Z2	SYS
Blackcraig														71.3		SPT	Wind	Z5	SYS
Margree														70		SPT	Wind	Z6	SYS
Camster														62.5		SHETL	Wind	Z1	SYS
Calliachar Wind Farm, Aberfeldy														62.1		SHETL	Wind	Z3	SYS
Aultmore Windfarm														60		SHETL	Wind	Z1	SYS
Dunbeath Wind Farm														55		SHETL	Wind	Z1	SYS
Montreathmont Moor Wind, Angus														40		SHETL	Wind	Z2	SYS
Carscreugh, Dumfries & Galloway														21		SPT	Wind	Z6	SYS
Pentland Road Wind, Lewis														13		SHETL	Wind	Z1	SYS
Pembroke 2 Stage 2															800	NGET	CCGT	Z13	SYS

Stroupster Wind Farm, near Wick, Caithness															31.5	SHETL	Wind	Z1	SYS
Blyth															1600	NGET	IGCC with CCS	Z7	SYS
Novar 2 Wind Farm, Alness															32	SHETL	Wind	Z2	C
North Nesting Wind, Shetland															250	SHETL	Wind	Z1	SYS
Bristol Channel Offshore Windfarm															1512	NGET	Offshore Wind	Z17	SYS
Eishken Estate, Isle of Lewis															300	SHETL	Wind	Z1	SYS
Fasnakyle Compensation Hydro (Unit 4)															7.5	SHETL	Hydro	Z1	UC
Black Craig 90MW, Dunoon															90	SHETL	Wind	Z4	SYS
Baillie & Bardnaheigh Wind															57	SHETL	Wind	Z1	SYS
Abernedd Stage 1															435	NGET	CCGT	Z13	SYS
Teesport															925	NGET	ICGCCT	Z7	SYS
	3870	290.4	645	49	1825	406.7	114	418.4	2970.8	8346.5	5757.8	5254.9	2152.5	4095.6	6040				
	3870	4160.4	4805.4	4854.4	6679.4	7086.1	7200.1	7618.5	10589.3	18935.8	24693.6	29948.5	32101	36196.6	42236.6				

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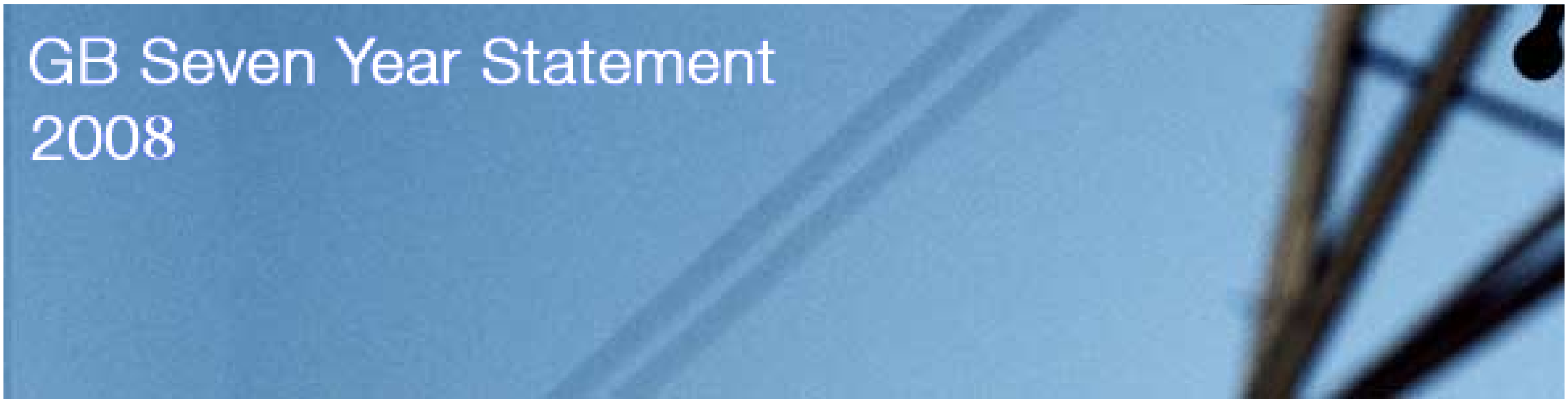

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Table 3.8 - Overview of Capacity Changes from 2000/01 to 2014/15

	Category	CCGT	CHP	Hydro	Imports	Coal	Wind	Offshore Wind	Biomass	OCGT	Total
1	Existing by 2008/09 Winter Peak	8735	0	0	500	3325	5567.7	5412	402	0	23941.7
2	Under Construction	6950	601	107.5	1320	0	645.25	0	0	0	9623.75
	Sub-Total (Lines 1 & 2)	15685	601	107.5	1820	3325	6212.95	5412	402	0	33565.45
3	Plant with Section 36 Consent and (where relevant) Section 14 Consent	4734	1109	30	80	363	903.21	0	45	49.9	7314.11
	Sub-Total (Lines 1 & 2 & 3)	20419	1710	137.5	1900	3688	7116.16	5412	447	49.9	40879.56

4	Plant without Section 36 Consent and (where relevant) Section 14 Consent	0	0	0	0	0	717.05	640	0	0	1357.05
	Total (Lines 1 & 2 & 3 & 4)	20419	1710	137.5	1900	3688	7833.21	6052	447	49.9	42236.61

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Table 3.9 - Additional Transmission Contracted Generation Capacity since 11 December 2006

Licensee	Station Name	Capacity (MW)	Year	Company	Plant Type
NGET	Abernedd Stage 1	435	2014/15	BP Alternative Energy International plc	CCGT
NGET	Brine Field	1020	2011/12	Thor Cogeneration Ltd	CCGT
NGET	Blyth	1600	2014/15	RWE Npower plc	Coal
NGET	Hatfield	800	2011/12	Powerfuel plc	IGCC with CCS
NGET	Teesport	925	2014/15	Coastal Energy Ltd	Integrated Coal/Gas CCT
NGET	East-West Interconnector Project	500	2011/12	EirGrid plc	Interconnector
NGET	Gwynt Y Mor Stage 1	294	2011/12	Gwynt Y Mor Offshore Wind Farm Ltd	Offshore Wind
NGET	Gwynt Y Mor Stage 2	294	2012/13	Gwynt Y Mor Offshore Wind Farm Ltd	Offshore Wind
NGET	Gwynt Y Mor Stage 3	147	2013/14	Gwynt Y Mor Offshore Wind Farm Ltd	Offshore Wind
NGET	Humber Gateway Stage 1	220	2011/12	E.ON UK Renewable Developments Ltd	Offshore Wind
NGET	Humber Gateway Stage 2	80	2011/12	E.ON UK Renewable Developments Ltd	Offshore Wind

NGET	Sheringham Shoal	315	2010/11	Scira Offshore Energy Ltd	Offshore Wind
NGET	Thanet Offshore Windfarm	300	2009/10	Thanet Offshore Wind Ltd	Offshore Wind
SHETL	Beinn an Turic 2	60	2012/13	CRE Energy Ltd	Wind

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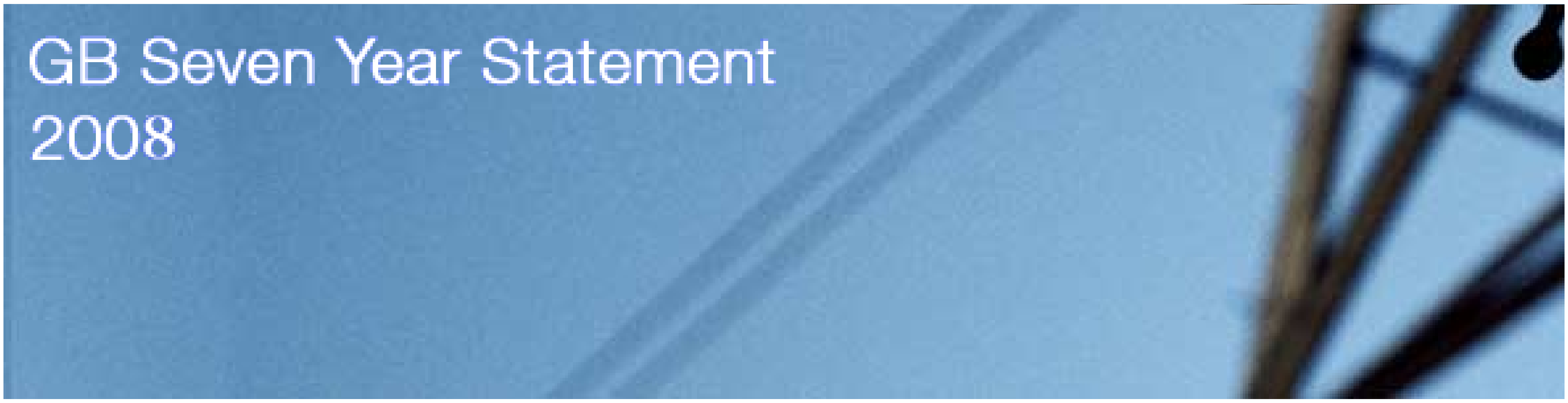

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Table 3.10 - Generation Disconnections since 2000/01

Licensee	Closure Year	Station Name	Set(s) Disconnected	Capacity (MW)	Plant Type	Owner	Commissioning Year
NGET	2000	Blyth A	1-4	456	Small Unit Coal	Npower Direct Ltd	1958-60
NGET	2000	Blyth B	7, 8	626	Medium Unit Coal	Npower Direct Ltd	1965-66
NGET	2000	Hinkley A	1-6	475	Nuclear Magnox	BNFL (Magnox Electric)	1965
NGET	2000	Letchworth MGT	1, 2	140	OCGT	National Power	1979
NGET	2000	Norwich MGT	7, 8	130	OCGT	National Power	1966
NGET	2001			0			
NGET	2002	Bradwell	1-6	240	Nuclear Magnox	BNFL (Magnox Electric)	1962
NGET	2003	Calder Hall	1-8	192	Nuclear Magnox	BNFL (Magnox Electric)	1956

NGET	2003	Drakelow C	9, 10, 12	999	Medium Unit Coal	PowerGen	1965-76
NGET	2003	High Marnham	1-5	945	Medium Unit Coal	PowerGen	1959-62
	2004			0			
SPTL	2005	Chapelcross	1-8	150	Nuclear Magnox	BNFL (Magnox Electric)	
	2006			0			
NGET	2007	Dungeness A	1-4	440	Nuclear Magnox	Magnox Electric plc	1965
NGET	2007	Sizewell A	1, 2	458	Nuclear Magnox	Magnox Electric plc	1966
	2008			0			
NGET	2009	Oldbury	1, 2	470	Nuclear Magnox	Magnox Electric plc	1967-68
NGET	2010	Wylfa	1, 2, 3, 4	1006	Nuclear Magnox	Magnox Electric plc	1971
	2011			0			
	2012			0			
	2013			0			
	2014			0			
			Total	6727			

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Table 3.11 - Unavailable Generating Units

Licensee	Year	Station Name	Unit(s)	Capacity (MW)	Owner	Plant Type	SYS Study Zone
NGET	1991	Cottam	G2, G4	50	EDF Energy	OCGT	Z10
NGET	1991	Ferrybridge C	G6, G7	34	Keadby Generation Ltd	OCGT	Z8
NGET	1991	Fiddlers Ferry	G1, G4	34	Keadby Generation Ltd	OCGT	Z9
NGET	1991	Kingsnorth	G2A, G3A	44	EON UK plc	OCGT	Z15
NGET	1991	Ratcliffe on Soar	G1, G3	34	PowerGen	OCGT	Z11
	1992			0			
	1993			0			
NGET	1994	Cottam	G1, G3	50	EDF Energy	OCGT	Z10
NGET	1994	Drax	G7	25	Drax Power Ltd	OCGT	Z8
NGET	1994	Eggborough	G6, G7	34	Eggborough Power Ltd	OCGT	Z8
NGET	1994	Fawley	1	500	RWE Npower plc	Oil	Z16
NGET	1994	Grain	2	675	EON UK plc	Oil	Z15

NGET	1994	Grain	G2A, G3A, G5A	87	EON UK plc	OCGT	Z15
NGET	1994	Ironbridge B	G1, G2	34	EON UK plc	OCGT	Z11
NGET	1994	Tilbury B	G7A	17	RWE Npower plc	OCGT	Z15
NGET	1994	West Burton	G2, G3	40	London Electricity	OCGT	Z10
NGET	1995	Fawley	G2, G4	34	RWE Npower plc	OCGT	Z16
NGET	1995	Littlebrook D	3	685	Innogy	Oil	Z14
	1996			0			
	1997			0			
NGET	1998	Grain	3	675	EON UK plc	Oil	Z15
NGET	1998	Tilbury B	G10A	17	RWE Npower plc	OCGT	Z15
NGET	1998	Tilbury B	7	350	RWE Npower plc	Medium Unit Coal	Z15
	1999			0			
	2000			0			
	2001			0			
NGET	2002	Killingholme 1	2S	150	EON UK plc	CCGT	Z8
NGET	2003	Killingholme 1	1S	150	EON UK plc	CCGT	Z8
NGET	2004	Killingholme 1	1A, 1B, 2A, 2B	600	EON UK plc	CCGT	Z8
	2005			0			
NGET	2006	Killingholme 1	1A, 1B, 1S, 2A, 2B, 2S	-900	EON UK plc	CCGT	Z8
NGET	2006	Fawley	1	-500	RWE Npower plc	Oil	Z16
	2007			0			
	2008			0			
	2009			0			
	2010			0			
	2011			0			
	2012			0			
	2013			0			
	2014			0			
			Total	2919			

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Table 3.12 - Nominal Interconnection Import and Export Capabilities (MW)

Licensee	Name	Normal Direction of Flow	Import Capability	Export Capability	Commissioning Year
NGET	French Link	Import	1988	2000	Existing
NGET	Netherlands Interconnector	Import	1320	1390	2010/11
NGET	Republic of Ireland	Export	500	500	2011/12
SPT	Northern Ireland	Export	80	500	Existing

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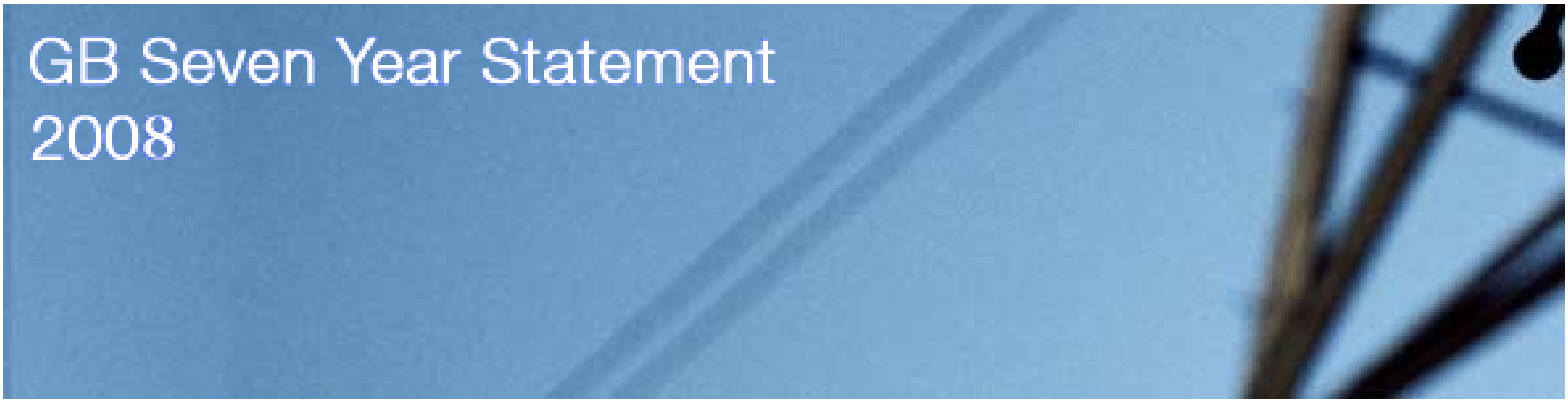

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Table 3.13 - Zonal Growth in Generation Capacity, 2008/09 to 2014/15

Major Zone	Minor Zone	Plant Type	Power Station	Change (MW)
Scotland (SHETL)	Scotland (SHETL)	Hydro	Glendoe, Fort Augustus	100
Scotland (SHETL)	Scotland (SHETL)	Hydro	Fasnakyle Compensation Hydro (Unit 4)	7.5
Scotland (SHETL)	Scotland (SHETL)	Wind	Millenium Wind, Ceannacroc Stage 3	15
Scotland (SHETL)	Scotland (SHETL)	Wind	Gordonbush Wind	87.5
Scotland (SHETL)	Scotland (SHETL)	Wind	Causeymire Phase 2	6.9
Scotland (SHETL)	Scotland (SHETL)	Wind	Berry Burn Windfarm	82.5
Scotland (SHETL)	Scotland (SHETL)	Wind	Beatrice	10
Scotland (SHETL)	Scotland (SHETL)	Wind	Strathy North & South Wind	226
Scotland (SHETL)	Scotland (SHETL)	Wind	Akron Wind (Caithness)	20
Scotland (SHETL)	Scotland (SHETL)	Wind	Lairg - Achany Wind Farm	62
Scotland (SHETL)	Scotland (SHETL)	Wind	Baillie & Bardnaheigh Wind	57
Scotland (SHETL)	Scotland (SHETL)	Wind	Aultmore Windfarm	60
Scotland (SHETL)	Scotland (SHETL)	Wind	Stroupster Wind Farm, near Wick, Caithness	31.5
Scotland (SHETL)	Scotland (SHETL)	Wind	Camster	62.5
Scotland (SHETL)	Scotland (SHETL)	Wind	Tomatin Windfarm	30
Scotland (SHETL)	Scotland (SHETL)	Wind	Fairwind (Orkney) Ltd	126

Scotland (SHETL)	Scotland (SHETL)	Wind	Fairburn Wind Farm	42
Scotland (SHETL)	Scotland (SHETL)	Wind	North Nesting Wind, Shetland	250
Scotland (SHETL)	Scotland (SHETL)	Wind	Eishken Estate, Isle of Lewis	300
Scotland (SHETL)	Scotland (SHETL)	Wind	Pairc (South Lochs) Wind, Lewis	250
Scotland (SHETL)	Scotland (SHETL)	Wind	Pentland Road Wind, Lewis	13
Scotland (SHETL)	Scotland (SHETL)	Wind	Edinbane Wind, Skye	42
Scotland (SHETL)	Scotland (SHETL)	Wind	Dunbeath Wind Farm	55
Scotland (SHETL)	Scotland (SHETL)	Wind	Kilbraur Wind Farm Stage 2	19.5
Scotland (SHETL)	Scotland (SHETL)	Wind	Mid Hill Wind, Stonehaven	75
Scotland (SHETL)	Scotland (SHETL)	Wind	Clashindarroch Wind, Huntly	112.7
Scotland (SHETL)	Scotland (SHETL)	Wind	Novar 2 Wind Farm, Alness	32
Scotland (SHETL)	Scotland (SHETL)	Wind	Montreathmont Moor Wind, Angus	40
Scotland (SHETL)	Scotland (SHETL)	Wind	Black Craig 40MW Windfarm, Dunoon	40
Scotland (SHETL)	Scotland (SHETL)	Wind	Calliachar Wind Farm, Aberfeldy	62.1
Scotland (SHETL)	Scotland (SHETL)	Wind	Ballindalloch Muir Wind Farm, Balfron	20.8
Scotland (SHETL)	Scotland (SHETL)	Wind	Griffin Windfarm	216
Scotland (SHETL)	Scotland (SHETL)	Wind	Carraig Gheal (Fernoch)	60
Scotland (SHETL)	Scotland (SHETL)	Wind	Shira	52
Scotland (SHETL)	Scotland (SHETL)		Beinn an Turic 2	60
Scotland (SHETL)	Scotland (SHETL)	Wind	Stacain Wind Farm, Sron Mor, Inveraray	42
Scotland (SHETL)	Scotland (SHETL)	Wind	Black Craig 90MW, Dunoon	90
Scotland (SHETL)	Scotland (SHETL)	Wind	Kingsburn Wind farm, Fintry, Stirling	20
	SHETL Total			2878.5
Scotland (SPT)	Scotland (SPT)	Biomass	Rothes Biopower Plant	52
Scotland (SPT)	Scotland (SPT)	Biomass	Blackcraig	71.3
Scotland (SPT)	Scotland (SPT)	Wind	Crystal Rig 2	200
Scotland (SPT)	Scotland (SPT)	Wind	Dun Law extension	29.75
Scotland (SPT)	Scotland (SPT)	Wind	Drone Hill	37.8
Scotland (SPT)	Scotland (SPT)	Wind	Auchencorth	45
Scotland (SPT)	Scotland (SPT)	Wind	Pencloe	63
Scotland (SPT)	Scotland (SPT)	Wind	Clyde	519
Scotland (SPT)	Scotland (SPT)	Wind	Margree	70
Scotland (SPT)	Scotland (SPT)	Wind	Windy Standard 2	60
Scotland (SPT)	Scotland (SPT)	Wind	Newfield	60
Scotland (SPT)	Scotland (SPT)	Wind	Fallago	144

Scotland (SPT)	Scotland (SPT)	Wind	Harrows Law	140
Scotland (SPT)	Scotland (SPT)	Wind	HearthStanes B Windfarm	81
Scotland (SPT)	Scotland (SPT)	Wind	Kyle	300
Scotland (SPT)	Scotland (SPT)	Wind	Limmer Hill	80
Scotland (SPT)	Scotland (SPT)	Wind	Longpark	38
Scotland (SPT)	Scotland (SPT)	Wind	Neilston	100
Scotland (SPT)	Scotland (SPT)	Wind	Harestanes	213
Scotland (SPT)	Scotland (SPT)	Wind	Waterhead Moor	120
Scotland (SPT)	Scotland (SPT)	Wind	Earlshaugh	108
Scotland (SPT)	Scotland (SPT)	Wind	Barmoor	30
Scotland (SPT)	Scotland (SPT)	Wind	Carscreugh, Dumfries & Galloway	21
Scotland (SPT)	Scotland (SPT)	Wind	Afton	77
Scotland (SPT)	Scotland (SPT)	Wind	Whiteside Hill	27
Scotland (SPT)	Scotland (SPT)	Wind	Ewe Hill	66
Scotland (SPT)	Scotland (SPT)	Wind	Ulzieside	69
Scotland (SPT)	Scotland (SPT)	Wind	Andershaw	45
Scotland (SPT)	Scotland (SPT)	Wind	Dersalloch	69
Scotland (SPT)	Scotland (SPT)	Wind	Toddleburn	36
Scotland (SPT)	Scotland (SPT)	Wind	Whitelee Stage 3	28.6
Scotland (SPT)	Scotland (SPT)	Wind	Arecleoch	150
Scotland (SPT)	Scotland (SPT)	Wind	Tormywheel	32.4
	SPT Total			3182.85
Scotland Total				6061.35
North	North	IGCC with CCS	Hatfield	800
North	North	Offshore Wind	Humber Gateway	80
North	North	Offshore Wind	Humber Gateway	220
North	North	CCGT	Amlwch	270
North	North	Interconnector	East-West Interconnector Project	500
North	North	Nuclear Magnox	Wylfa	-980
North	North	Offshore Wind	Gwynt Y Mor Stage 1	294
North	North	Offshore Wind	Gwynt Y Mor Stage 2	294
North	North	Offshore Wind	Gwynt Y Mor Stage 3	147
North	Upper North	CCGT	Brine Field	1020
North	Upper North	ICGCCT	Teesport	925
North	Upper North	IGCC with CCS	Blyth	1600

				5170
Midlands	Midlands	CCGT	Staythorpe C Stage 2	425
Midlands	Midlands	CCGT	West Burton B Stage 3	435
Midlands	Midlands	CCGT	Staythorpe C Stage 1	425
Midlands	Midlands	CCGT	Staythorpe C Stage 3	850
Midlands	Midlands	CCGT	West Burton B Stage 1	435
Midlands	Midlands	CCGT	West Burton B Stage 2	435
Midlands	Midlands	CCGT	Drakelow D	1230
	Midlands Total			4235
South	Central	CCGT	Little Barford B	475
South	Central	CCGT	Sutton Bridge B	1305
South	Central	Offshore Wind	Greater Gabbard Offshore Wind Farm	500
South	Central	Offshore Wind	Race Bank Wind Farm	500
South	Central	Offshore Wind	Lincs Offshore Wind Farm	250
South	Central	Offshore Wind	Docking Shoal Wind Farm Ltd	500
South	Central	Offshore Wind	Sheringham Shoal	315
South	Central	Biomass	Port Talbot	350
South	Central	CCGT	Abernedd Stage 1	435
South	Central	CCGT	Pembroke 1 Stage 2	1200
South	Central	CCGT	Pembroke 1 Stage 1	800
South	Central	CCGT	Pembroke 2 Stage 2	800
South	Central	CCGT	Didcot B	50
South	Central	CCGT	Severn Power Stage 1	425
South	Central	CCGT	Pembroke 2 Stage 1	1200
South	Central	CCGT	Severn Power Stage 2	425
South	Central	Nuclear Magnox	Oldbury	-470.4
South	Central	Wind	Rhigos	299
	Central Total			9358.6
South	Estuary	CCGT	Grain Stage 1	860
South	Estuary	CCGT	Grain Stage 2	430
South	Estuary	Interconnector	Netherlands Interconnector Stage 3	520
South	Estuary	Interconnector	Netherlands Interconnector Stage 2	800
South	Estuary	Offshore Wind	London Array Stage 1	200
South	Estuary	Offshore Wind	Thanet	300
South	Estuary	Offshore Wind	London Array Stage 2	800

	Estuary Total			3910
South	South West	Offshore Wind	Bristol Channel Offshore Windfarm	1512
	South West Total			1512
E & W Total				24185.6
GB SYSTEM TOTAL				30246.95

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Table 3.14 - Subtotals of TEC (MW) by Plant Type and SYS Study Zone, 2008/09

Plant Type	Z1	Z2	Z3	Z4	Z5	Z6	Z7	Z8	Z9	Z10	Z11	Z12	Z13	Z14	Z15	Z16	Z17	Total
Biomass					0	45							0					45
CCGT		1524					1925	4953	2852	1275	0	3031	3531	2123	2305	1320	905	25744
CHP		12			123	120		1320	365		228					158		2326
Hydro	424.08	18	320.62	232.5		33												1028.2
ICGCCT																		0
IGCC with CCS							0	0										0
Interconnector						80									1988			2068
Large Unit Coal					2304								2109					4413
Large Unit Coal + AGT								7827	1987	3987	4003		1692		1966			21462
Medium Unit Coal						1152												1152
Medium Unit Coal + AGT															1121			1121
Nuclear AGR						2410	1207		2406						1081		1261	8365
Nuclear Magnox									980				470.4					1450.4
Nuclear PWR												1200						1200
OCGT	10												100	144		194.9	140	588.9
Offshore Wind									140			0			0			140
Oil + AGT														1245	1355	1036		3636
Pumped Storage	300		440						2004									2744
Small Unit Coal							420						363					783
Wind	447.9	71.2	73.75	187.61	35	835.4							0					1650.86
Total	1181.98	1625.2	834.37	420.11	2462	4675.4	3552	14100	10734	5262	4231	4231	8265.4	3512	9816	2708.9	2306	79917.36

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Table 3.15 - Subtotals of TEC (MW) by Plant Type and SYS Study Zone, 2014/15

Plant Type	Z1	Z2	Z3	Z4	Z5	Z6	Z7	Z8	Z9	Z10	Z11	Z12	Z13	Z14	Z15	Z16	Z17	Total
Biomass	0	0	0	0	52	45	0	0	0	0	0	0	350	0	0	0	0	447
CCGT	0	1524	0	0	0	0	2945	4953	3122	4280	1230	4811	8866	2123	3595	1320	905	39674
CHP	0	12	0	0	123	120	0	1320	365	0	228	0	0	0	0	158	0	2326
Hydro	531.58	18	320.62	232.5	0	33	0	0	0	0	0	0	0	0	0	0	0	1135.7
ICGCCT	0	0	0	0	0	0	925	0	0	0	0	0	0	0	0	0	0	925
IGCC with CCS	0	0	0	0	0	0	1600	800	0	0	0	0	0	0	0	0	0	2400
Interconnector	0	0	0	0	0	80	0	0	500	0	0	0	0	0	3308	0	0	3888
Large Unit Coal	0	0	0	0	2304	0	0	0	0	0	0	0	2109	0	0	0	0	4413
Large Unit Coal + AGT	0	0	0	0	0	0	0	7827	1987	3987	4003	0	1692	0	1966	0	0	21462
Medium Unit Coal	0	0	0	0	0	1152	0	0	0	0	0	0	0	0	0	0	0	1152
Medium Unit Coal + AGT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1121	0	0	1121
Nuclear AGR	0	0	0	0	0	2410	1207	0	2406	0	0	0	0	0	1081	0	1261	8365
Nuclear Magnox	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nuclear PWR	0	0	0	0	0	0	0	0	0	0	0	1200	0	0	0	0	0	1200
OCGT	10	0	0	0	0	0	0	0	0	0	0	0	100	144	0	194.9	140	588.9
Offshore Wind	0	0	0	0	0	0	0	300	875	0	0	2065	0	0	1300	0	1512	6052
Oil + AGT	0	0	0	0	0	0	0	0	0	0	0	0	0	1245	1355	1036	0	3636
Pumped Storage	300	0	440	0	0	0	0	0	2004	0	0	0	0	0	0	0	0	2744
Small Unit Coal	0	0	0	0	0	0	420	0	0	0	0	0	363	0	0	0	0	783
Wind	2296.3	330.9	412.65	511.61	106.3	3894.95	0	0	0	0	0	0	299	0	0	0	0	7851.71
Total	3137.88	1884.9	1173.27	744.11	2585.3	7734.95	7097	15200	11259	8267	5461	8076	13779	3512	13726	2708.9	3818	110164.31

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Table 3.16 - Transmission Contracted Generation beyond 2014/15

Licensee	Project Name	Capacity (MW)	Registered Company Name	Plant Type	Connection Point	Agreement Type
NGET	Abernedd Stage 2	435	BP Alternative Energy International Ltd	CCGT	Baglan Bay	BCA
NGET	Bradwell B	1650	British Energy Generation Ltd	Nuclear	Bradwell 400kV	BCA
NGET	Dungeness C	1650	British Energy Generation Ltd	Nuclear	Lydd 400kV	BCA
NGET	Hinkley Point C	3300	British Energy Generation Ltd	Nuclear	Hinkley Point 400kV	BCA
NGET	Sizewell C Stage 1	1650	British Energy Generation Ltd	Nuclear	Sizewell North 400kV	BCA
NGET	Sizewell C Stage 2	1650	British Energy Generation Ltd	Nuclear	Sizewell North 400kV	BCA
SHETL	Glenmoriston Hydro Group (Additional Capacity)	6	SSE Generation Limited	Hydro	Fort Augustus	BCA
SHETL	Stromness Wave Farm, Orkney	22.5	CRE Energy Ltd	Wave	Kirkwall	BEGA

SHETL	Aberchalder Cluster Wind farms, Ft Augustus	300	Gamesa Energy UK Ltd	Wind	Fort Augustus	BCA
SHETL	Beatrice Offshore Wind Farm, Dunbeath	1000	SSE Generation Limited	Wind	TBC	BCA
SHETL	Braemore Windfarm, Shin	66	Wind Prospect Developments Limited	Wind	Shin 33kV	BCA
SHETL	Cairn Duhie Wind Farm, Ferness, Nairn	34.5	Renewable Energy Systems UK Ltd	Wind	Berry Burn	BEGA
SHETL	Cairn Uish phase 2	40	Fred Olsen Wind 1 Limited	Wind	Dallas 33kV	BELLA
SHETL	Cambusmore Windfarm	41.4	Renewable Energy Systems UK Ltd	Wind	Cambusmore Windfarm 132kV	BCA
SHETL	Careston Wind Farm, Brechin, Angus	31.5	Renewable Energy Systems UK Ltd	Wind	Brechin	BCA
SHETL	Corriemoillie Windfarm, Dingwall	22	E.ON UK plc	Wind	Beauly 33kV	BCA
SHETL	Dorenell Wind Farm	180	Infinergy Ltd	Wind	Keith grid	BCA
SHETL	Drummuir Wind, Keith	48.3	Renewable Energy Systems UK Ltd	Wind	Beauly 132kV	BCA
SHETL	Dumnaglass Wind Farm, Stratherrick, Inverness	108	Renewable Energy Systems UK Ltd	Wind	Beauly/Foyers	BCA
SHETL	Forse 60MW Windfarm	60	Wind Energy (Forse) Limited	Wind	Forse Windfarm 33kV	BCA
SHETL	Glen Calvie B Wind Farm, Ardgay	45	Wind Energy (Glencalvie) Limited	Wind	Beauly / Shin	BCA
SHETL	Glen Calvie Wind Farm, Ardgay	69	Wind Energy (Glencalvie) Limited	Wind	Beauly / Shin	BCA
SHETL	Hanna Windfarm	81	Wind Energy (Hanna) Limited	Wind	Fort William 33kV	BCA
SHETL	Hill of Fare Wind Farm, Banchory	150	Infinergy Ltd	Wind	Kintore	BCA

SHETL	Invercassley Windfarm, Lairg	50	Airtricity Developments (Scotland) Ltd	Wind	Lairg	BCA
SHETL	Jacksbank Windfarm, Glenbervie	81	Ron Shanks Development Project Limited	Wind	Mid Hill	BCA
SHETL	Kilchattan Wind Farm, Campbeltown, Kintyre	10	Wind Prospect Developments Ltd	Wind	Carradale 33kV	BELLA
SHETL	Loch Luichart Wind, Conon Valley	66	Infinergy Ltd	Wind	Beauly 132kV	BCA
SHETL	Lochelbank Windfarm, Bridge of Earn, Perthshire	12	Lochelbank Windfarm Ltd	Wind	Abernethy 33kV	BELLA
SHETL	Meikle Carewe Wind Farm, Stonehaven	11	Renewable Energy Systems UK Ltd	Wind	Redmoss	BEGA
SHETL	Pentland Road Wind, Lewis (SRO)	13	Farm Energy Ltd	Wind	Stornoway 132/33kV	BELLA
SHETL	Perth 38 MW Windfarm	38	Wind Energy (Dunan) Limited	Wind	Glen Quaich 275/33kV	BCA
SHETL	Rosehall, Shin	28.5	E.ON UK Renewables Ltd	Wind	Shin 33kV	BCA
SHETL	Spittal Hill Windfarm, Nr Mybster, Caithness	80	Spittal Hill Wind Farm Limited	Wind	Mybster	BCA
SHETL	Tofingall Wind Farm, Mybster, Caithness	50	Gamesa Energy UK Ltd	Wind	Mybster	BEGA
SHETL	Tom Nan Clach Windfarm, Cawdor, Inverness	150	Infinergy Ltd	Wind	Inverness	BCA
SHETL	Tomatin Wind Farm (Additional Capacity)	69	Eurus Energy UK Limited	Wind	Beauly/Boat of Garten 132kV	BCA
SHETL	Viking Energy, Shetland	300	Viking Energy, Ltd	Wind	Shetland 132kV	BCA
SPT	Chapelcross Biopower CHP Plant	250	Scottish Biopower Ltd	Biopower CHP	Chaplecross 11kV	BCA

SPT	Killoch Biopower CHP Plant	250	Scottish Biopower Ltd	Biopower CHP	Coylton 11kV	BCA
SPT	Blacklaw Extension	69	CRE Energy Ltd	Wind		BCA