



Final Report to

**Comhairle Nan Eilean Siar and
The Highland Council**

**An Evaluation of Alternative/Renewable
Energy Schemes**

ANNEXES

by

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in association with

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ANNEX A – SCHEME SPECIFIC PARAMETERS

This section describes the economic parameters, used in the models, which are scheme specific. It should be read alongside Section 2 of the main report, which outlines the economic parameters common to all of the models.

Onshore Wind

Resources

The resources available for onshore wind generation will be determined by the wind regime at the site selected. Typical wind availability (taking account of periods when the wind does not blow but not down-time for maintenance and repairs – see ‘Turbine Availability’ below) for onshore wind range between 25% and 40% depending on the locality and indeed the weather conditions in any given year. As Scotland is one of the windiest areas in Europe load factors towards the higher end of the range could be expected. However, we have used a conservative load factor of 30% for the Base Case which represents environmental sensitivities around the siting of a project (for example, the best wind resource may not be obtainable if it is in an environmentally sensitive area).

Station Size

As wind generation has grown and more wind farms have been built, the size of typical schemes has also increased. Early wind farms consisted of only a few turbines, each of which had capacities of only a few hundred kW. Today’s turbines are much larger, typically between 1.5MW – 2.5MW each. In addition, the number of turbines per farm has also increased, with farms consisting of 25 – 50 structures not uncommon. This trend is expected to continue and there are currently turbines on the market with capacities of 3, 4 and even 5MW. We have modelled two onshore wind schemes – one at 40MW and one at 100MW. The 40MW scheme is assumed to consist of twenty turbines each of 2MW and the 100MW scheme consists of forty turbines each of 2.5MW¹. The smaller turbines for the 40MW project have been chosen to reflect the likely environmental sensitivities, such as visual intrusion, of such a project (since if there were no such environmental sensitivities a larger project would most likely be proposed for the area). It has been assumed that both schemes would be connected to the 132kV transmission system.²

Turbine Availability

The Turbine Availability represents the length of time that the turbine is available throughout the year. A typical figure for an on-shore turbine’s availability is 98%, with 2% down-time for routine maintenance and repairs.

Construction Costs

Construction costs for onshore wind developments are usually quoted in £/kW. These figures typically include capital costs for the towers and turbines, as well as the costs of electrical

¹ GE’s new series turbines are rated at 2.3MW, 2.5MW and 2.7MW

² Although the 40MW scheme could be connected to the distribution system it is very unlikely that this would occur and instead it would most likely be connected to the transmission system to enable voltage control.

connection, civil works, grid connection, project management, installation, insurance covering the construction period, legal advice, bank fees and interest during construction. They also typically include the project development costs (i.e. the pre-construction costs).

Construction costs for wind farms are very site-specific and depend on the site location, conditions and local infrastructure such as roads. Remote sites with difficult access will be more expensive to build on but may have the potential for better yield in terms of their wind resources.

Capital costs have dropped significantly since the first commercial wind farm was built in the UK in 1990. In 1991 capital costs were around £1,000/kW of installed capacity but have dropped to the current price of around £700/kW³.

Given the sparse road network in much of Scotland and the corresponding likelihood of higher expenditure on civil works, we have used a combined construction and capital cost of £750/kW of installed capacity in our Base Case. Within this figure, we have assumed electrical connection costs of 7% of total capital expenditure, based on a sample quote for a 10 km connection to a 132 kV transmission line in a fairly remote area. It must be noted that these are 'average' figures only which will vary for each individual project location.

Pre-construction project development costs are also highly variable, but a 'rule of thumb' in the industry is that the development of each project will cost £90-200,000 plus a further £50,000 if there is a planning appeal. These costs depend largely on the environmental sensitivities of the site (an Environmental Statement will cost at least 50% of the development expenditure). The likelihood of failure to obtain planning permission will also increase the effective 'cost' of development, as developers will require a greater return on their investment to cover this risk. Given that average planning approval rates are around 90% in Scotland (as opposed to closer to 50% in England), developers will not be adding a significant premium for planning risk. This has been taken into account in the discount rate for the project. Although development costs are significant, particularly for a small developer, they are small in relation to the capital costs of construction and can therefore be considered to be included in the figures quoted above.

Operating Costs

Operation and maintenance costs are incurred during the routine operation of the turbines. They include regular servicing of the machine, land rental, rates and insurance. Operating costs can be higher for remote wind farms that are difficult to access, although servicing several turbines on the same visit can reduce costs.

Typically, the annual costs of operation and maintenance are between 1.5% and 2% of the turbine capital costs. We have used 2% in our Base Case analyses to reflect the relatively long distances likely to be travelled for maintenance in the North of Scotland.

Wind power developments are liable to pay rates. The current rateable value of wind power in Scotland is £5,000 per MW⁴, to which we have applied the current Scottish Non-Domestic Rate of 47.8p⁵ in the pound. This means that a windfarm of 100MW will pay rates of £239,000 (100x£5,000x£0.478) per year to the local council.

³ Costs for Windy Standard development in Dumfries were £810/kW and for Lambrigg development in Cumbria were £692/kW.

⁴ The Electricity Generators (Rateable Values) (Scotland) Order 2000 – Scottish Statutory Instrument 2000 No. 86

⁵ The Non-Domestic Rate (Scotland) Order 2003 – Scottish Statutory Instrument 2003 No. 123

Timing of Project

We have assumed a date for first energy from the project of the second half of 2007 and the output is initially reduced while the station is being commissioned. This is based on the typical lag time for project design and development and includes an allowance for local consultation and obtaining planning permission. We have assumed a project life of 20 years, which is typical of the lifetime for a wind farm.

Offshore Wind

Resources

In comparison to onshore wind, it is expected that offshore wind will attain higher load factors. This is because the sea is flatter than the land, and so the air turbulence is lower. Lower turbulence gives rise to a more constant wind pattern and to higher overall output. For the Base Case we have used a load factor of 40% for offshore turbines.

Station Size

Although there is currently only one operating offshore wind farm in Great Britain (Blyth in Northumberland), several are currently in the process of being constructed and there are several already in operation in Denmark. The sizes of the GB farms currently in the planning process are around 100MW. As with the onshore wind farms, the sizes of the next generation of offshore wind farms are expected to be larger, both in terms of the number and capacity of the turbines. We have thus assumed a total capacity of 200MW for the offshore wind farm, consisting of 50 turbines, each of 4MW.

Turbine Availability

Offshore wind is likely to have a turbine availability of 95%. This is slightly lower than onshore wind due to the extra time it would take to access and service the wind turbines.

Construction Costs

As with onshore wind, offshore wind construction costs are commonly quoted in £/kW including costs for foundations and electricity cables, installation, planning and legal costs.

The costs for offshore wind are higher than for onshore turbines due several factors including:

- The cost of the cable connection to shore;
- More expensive foundations; and
- The need to ‘marinise’ the turbines to protect them from the corrosive offshore conditions.

Capital costs for offshore wind have also dropped significantly since the first commercial wind farm was built in Denmark in 1991. Then, capital costs were around £1,400/kW of installed capacity but have dropped to the current price of around £1,000/kW.⁶ This is the value we have used in our Base Case and is comparable with the offshore farms currently under construction in Great Britain.

⁶ Costs for the North Hoyle development in Wales have been reported as £1,167/kW and the Scroby Sands development in England as £921/kW.

Operating Costs

Operation and maintenance costs for offshore wind farms are higher than those for onshore wind farms, reflecting the risk of lower availability due to reduced access during bad weather. Also reflected are the extra costs incurred for the maintenance vessel required to transport the maintenance team.

Typically the costs of operation and maintenance are quoted to be 4% of the turbine capital costs. This is the value we have used in our Base Case analysis.

As with the Onshore Wind developments, Offshore Wind developments are liable to pay rates of £5,000 per MW⁷, to which we have applied the current Scottish Non-Domestic Rate of 47.8p⁸ in the pound. This means that a windfarm of 200MW will pay rates of £478,000 (200x£5,000x£0.478) per year to the local council.

Offshore Windfarms will also be liable to pay a levy to the Crown Estates for the use of the seabed. The current developers of offshore windfarms in Great Britain (round one of the seabed lease) entered into agreements to provide the Crown Estate with a rent provision based on 2% of gross revenue and it is intended that this is extended to all developers in round two. We have assumed, in our modelling, that 2% of the gross revenue is paid to the Crown Estate.

Timing of Project

We have assumed a date for first energy from the project of the second half of 2007 and the output is initially reduced while the station is being commissioned. This is based on a lag time for project design and development and includes an allowance for local consultation and planning permission. Although offshore wind farms are not expected to suffer as much from local opposition for planning consent as onshore wind farms, they face additional hurdles in the form of Strategic Environmental Assessments and the fact that legislation is currently required to allow consent for wind farms beyond territorial limits on the UK Continental Shelf. Currently only three areas have been targeted for fast-tracking of offshore wind farm development under the Crown Estates offshore wind program: the Thames Estuary, Greater Wash and North-West regions.

As the installation of turbines in the sea is very dependent on the sea conditions we have assumed that this development is installed in two phases – half in 2007 and half in 2008. We have assumed a project life of 20 years, which is expected to be typical of the lifetime of an offshore wind farm.

Hydro

Resources

Two types of hydro station are possible – dammed schemes and run-of-river schemes. Dammed schemes involve the flooding of an area to create a large artificial lake, from which the water flow is controlled. Run-of-river schemes divert the flow of water from a river,

⁷ The Electricity Generators (Rateable Values) (Scotland) Order 2000 – Scottish Statutory Instrument 2000 No. 86

⁸ The Non-Domestic Rate (Scotland) Order 2003 – Scottish Statutory Instrument 2003 No. 123

usually over a small dam with very limited storage capacity, through a turbine to generate electricity, and then route the water back to the river.

The majority of schemes currently in operation in the UK were built between 1930 and 1970, and during that time most of the sites with the biggest potential capacity were developed. These tended to be nearly all of the potential dammed sites. Dammed schemes can choose to generate electricity at times of high prices to maximise their revenue. These times are termed “Peak Hours” and occur approximately 36% of the year. For the dammed schemes we have assumed that the operators choose to access the Peak Prices and operate for 36% of the year, thus giving a capacity factor of 36%.

Sites currently under development tend to be smaller and run-of-river, rather than dammed. Typically, these schemes have load factors of around 50% (based on times when there is sufficient water in the river) and this is the load factor we have used for our sample run-of-river scheme. Run-of-river schemes do not have the ability to choose to generate only at peak hours since they can only run when there is sufficient water in the river.

Station Size

Given the range of potential hydro resources in the North of Scotland we have modelled three different schemes – a 1MW run-of-river scheme, a small 5MW dammed scheme and a large 80MW dammed scheme.

Imbalance Mechanism Bids & Offers

There is a further potential source of income to hydro stations in addition to the electricity price, ROC price and LECs discussed in section 2.3 - power sold to the Transmission System Operator to help keep the generation and demand on the system balanced at all times. Under the existing trading arrangements in England and Wales, generators and suppliers make competing bids and offers to the System Operator (SO) for the provision of any shortage (or to absorb any surplus) of electricity on the system. In order to provide this service to the System Operator, generation needs to be physically flexible and able to respond quickly to the SO’s requests. Consequently balancing power can command significant price premiums.

The nature of dammed hydro generation would make it perfectly feasible for any scheme to provide the SO with balancing power, once the BETTA arrangements are introduced in Scotland. However, SSE already has a great deal of flexible generation in the north of Scotland and already provides all the balancing power necessary to balance its own system, as well as sending some down the Interconnector to E&W. Even within a GB system, there is a limit to how much balancing power is required from the north of Scotland, and although this is a potential extra revenue stream we have not included any balancing income in our models.

Similarly, the System Operator requires a number of ancillary services such as voltage, frequency and reactive power control, which could be provided by a hydro scheme. While these could represent a further source of income we have not included these in the models as their value is very hard to predict and depends on a range of other extrinsic factors, including for example the total amount of variable generation such as wind on the system (as variable generation generally requires more ancillary services).

Turbine Availability

Typical figures for turbine availability for hydro schemes range between 92-98%, depending on the type of turbine used. For all the hydro schemes we have assumed a turbine availability of 95%.

Construction Costs

Construction costs for hydro schemes vary, depending on the geology and existing infrastructure in the area to be developed. For the run-of-river scheme we have assumed a capital cost of £1240/kW, based on information in the public domain. For the small dammed hydro we have used a cost of £1,450/kW⁹ and for the large dammed hydro a cost of £1,063/kW.¹⁰

Operating Costs

Market information indicates that annual operation and maintenance costs for hydro schemes should be within the range of 2% - 3% of the capital costs. We have therefore used 2.2% for the operating costs in our analysis.

As with the Wind developments, Hydro developments are liable to pay rates. The current rateable value of hydro plants in Scotland is £10,000 per MW¹¹, to which we have applied the current Scottish Non-Domestic Rate of 47.8p¹² in the pound. This means that a hydro scheme of 80MW will pay rates of £382,400 (80x£10,000x£0.478) per year to the local council.

Timing of Project

We have assumed a date for first energy from the project of the second half of 2007 and the output is initially reduced while the station is being commissioned

We have assumed that the schemes will be operational for 20 years, to be consistent with the other technologies being analysed. General project lifetimes for hydro schemes can be anywhere up to 50 years before full refurbishment of the site is required. For the purpose of this study electricity price forecasts going out past 20 years would have little meaning considering the fluidity of the electricity industry.

Wave/Tidal

Wave and tidal technology is at very early stage of development and, although there are several small-scale test installations, little operational data is available for commercial schemes. There are many proposed types of wave and tidal schemes, only several of which are at the prototyping stage. One example is being tested at the European Marine Energy Centre in Orkney.

Tidal schemes would be predominantly based on the seabed and would generate electricity as tidal currents passed through a turbine or over a set of 'wings'. The turbine-based schemes are probably closest to commercial development and in principle act like a submerged wind

⁹ Based on £1,430/kW for 3.5MW plant at Coinnich, Kingairloch, Ardgour.

¹⁰ Based on £85M for scheme on the banks of Loch Ness – size between 50MW and 100MW.

¹¹ The Electricity Generators (Rateable Values) (Scotland) Order 2000 – Scottish Statutory Instrument 2000 No. 86

¹² The Non-Domestic Rate (Scotland) Order 2003 – Scottish Statutory Instrument 2003 No. 123

turbine. For the site to be viable it would need sufficient tidal current velocities to generate the power (2-3 metres/second mean spring peak current) as well as water depth of 20-40 metres at low tide.¹³ Another example of a tidal scheme is a tidal barrage, whereby a dam or barrage is built across a river or bay, which allows water to flow through it into the basin as the tide comes in. When the tide recedes, gates in the barrage are opened and electricity is generated as the water passes through turbines. This is a relatively well-understood technology and an example of this has been in operation in Normandy, France for many years. However, it has greater environmental impacts than stand-alone tidal current turbines, and the number of suitable sites is also more limited, although the potential generating capacity of those sites is significant.

Likewise, there are several types of wave schemes that are nearing commercial development, such as the Oscillating Water Column (OWC), whereby waves force air up the column and through a pneumatic turbine to generate electricity, and stationary devices that take the energy out of the motion (or height) of the wave as the wave passes through it. Wave schemes can be fixed on shore, fixed off shore or floating. Clearly for all wave devices the topography of the sea floor and potentially also the shoreline is likely to be a major factor.

Resources

As with offshore wind the potential for wave and tidal power in the North of Scotland is very large.

For this analysis we have assumed a tidal scheme with individual turbines on the seabed. Load factors for these schemes have been quoted at between 30 and 40%. We have therefore used 30% for the Base Case, given the uncertainty surrounding the technology.

Station Size

Tidal power is a relatively immature technology in Great Britain and trials have only recently begun. Marine Current Turbines Ltd (MCT) installed the first 'prototype' offshore tidal current scheme on the 16th June 2003 in Lynmouth, North Devon, rated at 300kW.

Once commercial, the turbines will initially be rated from 500kW to 1MW depending on the local flow pattern and peak velocity. We have therefore assumed a development consisting of five 1MW machines.

Turbine Availability

Public information data indicates that wave and tidal turbine availability will be lower than that for wind turbines, and will be in the region of 90%. This is the figure we have used for this model.

Construction Costs

Information in the public domain suggests that construction costs for proposed tidal schemes were between £1,100/kW and £1,350/kW in 2002. We have used a cost of £1,400/kW in the Base Case as a conservative estimate incorporating inflation of 2002 figures to 2003.

¹³ Peter Fraenkel, Marine Current Turbines Ltd, presentation to BWEA25 Annual Conference, Glasgow, October 2003.

Operating Costs

Similarly, for operating costs no data are publicly available. We have therefore chosen for the base case the costs of operation and maintenance as quoted for the off-shore wind farm at 4% of the turbine capital costs.

As with the other developments, tidal developments are liable to pay rates and the level of £5,000 per MW¹⁴ is applicable to tidal power. To this we have applied the current Scottish Non-Domestic Rate of 47.8p¹⁵ in the pound. This means that a tidal scheme of 5MW will pay rates of £11,950 (5x£5,000x£0.478) per year to the local council.

Timing of Project

We have assumed a date for first energy from the project of the second half of 2007 and the output is initially reduced while the station is being commissioned. This is based on a lag time for project design and development and includes an allowance for local consultation and planning permission. As with all of the technologies we have assumed a project length of 20 years.

Summary of Model Parameters

The table below shows the key parameters used for the models.

Table A1: Summary of Model Parameters

Project Description	Small run-of-river Hydro	Small Dammed Hydro	Large Dammed Hydro	Large Onshore Wind	Small Onshore Wind	Large Offshore Wind	Tidal
Project Size (MW)	1	5	80	100	40	200	5
Turbine Size (MW)	1	5	80	2.5	2	4	1
Capacity Factor (%)	50	36	36	30	30	40	30
Turbine Availability (%)	95	95	95	98	98	95	90
CAPEX (£/kW)	1,240	1,450	1,063	750	750	1,000	1,400
Yearly OPEX (% of CAPEX)	2.2	2.2	2.2	2	2	4	4

¹⁴ The Electricity Generators (Rateable Values) (Scotland) Order 2000 – Scottish Statutory Instrument 2000 No. 86

¹⁵ The Non-Domestic Rate (Scotland) Order 2003 – Scottish Statutory Instrument 2003 No. 123

ANNEX B - THE ELECTRICITY MARKETS

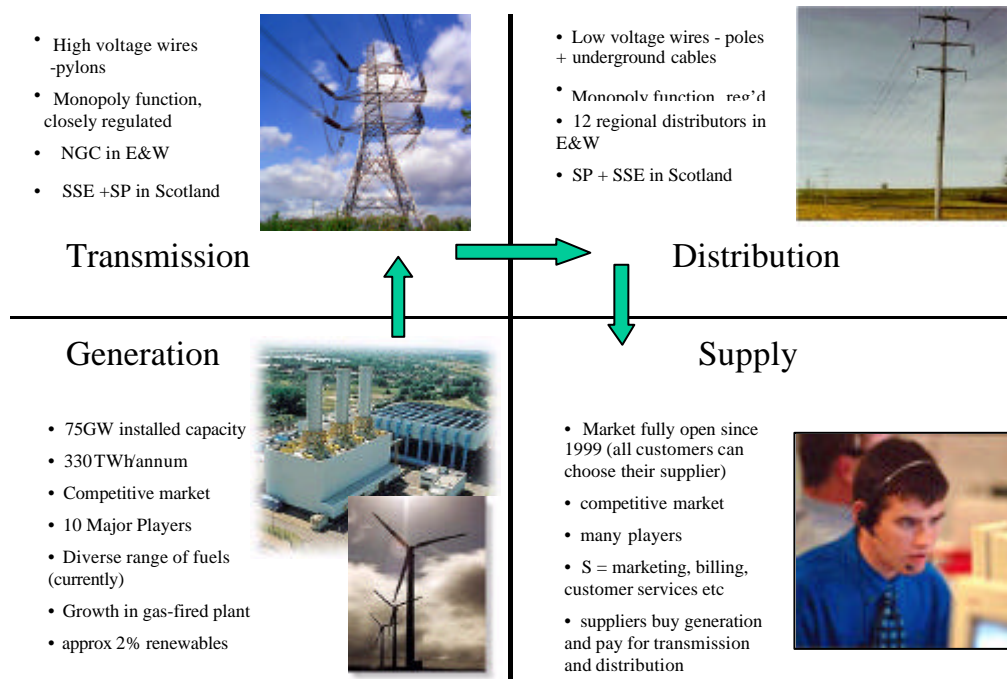
This annex is effectively an introduction to the key elements of the electricity industry and the wholesale markets in GB. It also indicates the most significant political and regulatory issues of relevance to a renewable generator in the GB market(s).

Overview of Industry Structure

The electricity market in the UK consists of four major components, generation, transmission, distribution and supply, as illustrated in the diagram below. The monopoly 'wires' elements are subject to stringent regulatory controls and are closely supervised by the industry regulator Ofgem (the Office of Gas and Electricity Markets). The primary functions of the regulator in this respect are to ensure that there is no discrimination in the provision of access to the transportation systems and that price levels are reasonable. The competitive elements of the market (generation and supply) are also overseen by Ofgem, although its role is becoming less interventionist as the markets become more competitive. Ofgem shares powers with the Office of Fair Trading to pursue generators and suppliers for breaching competition legislation.

Where once the industry was dominated by vertically integrated companies who were involved in both monopoly and competitive functions, the Government and the Regulator have increasingly forced legal separation between wires businesses and generation/supply businesses.

The GB Electricity Industry

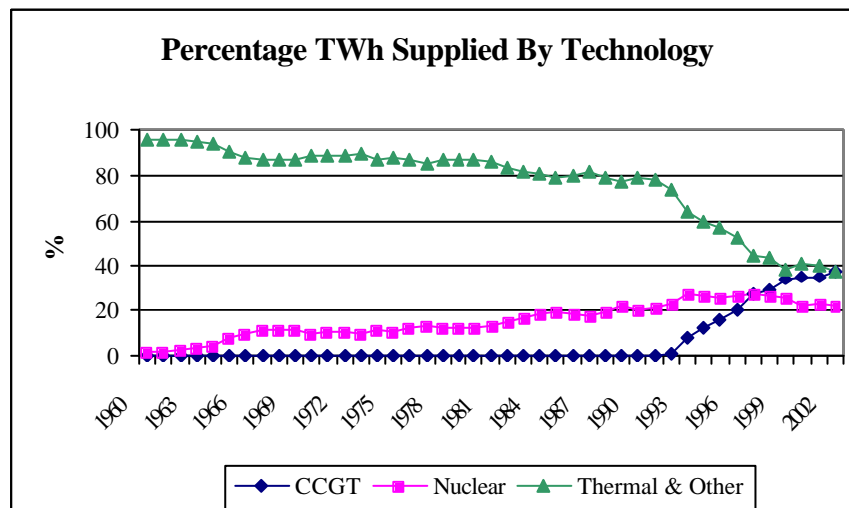


Generation

In England and Wales (E&W) generators compete in a market. Until March 2001, this market was a compulsory Pool, in which generators bid against each other, in what was effectively an auction, for the right to run in each half-hour. Since March 2001 the Pool has been abolished and generators compete with each other to sell their output directly to suppliers. In Scotland, there is currently no market and almost all generation is provided by the two incumbents, ScottishPower (SP) and Scottish and Southern Energy (SSE). The wholesale markets are considered in more depth in below.

Immediately following privatisation, there were only three major generating companies operating in the E&W market. Since then, there has been significant plant divestment and new entry and there are now ten players with reasonable market shares. There are also perhaps 30 other companies operating in some aspect of the generation market, although many of them are very small. A significant proportion of the E&W generation market for example is now 'new entrant' gas plant, where ownership is diverse and normally confined to one, or perhaps two, power stations. During the 90s, a fairly substantial market in small-scale generation also developed, in particular, small generating stations attached to large industrial or commercial premises. In response to Government initiatives, we are currently seeing increased interest in the construction of generation using renewable fuel sources and good quality combined heat and power plant.

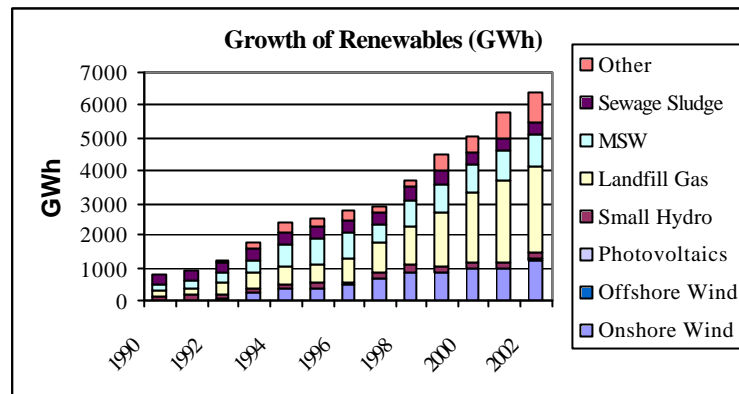
The fuel mix for generating capacity in GB remains reasonably diverse – a mixture of nuclear, gas, coal, hydro (including pumped storage), oil, and a selection of renewable resources, including wind, hydro, waste and biomass. However, gas-fired plant is currently the most economically viable form of (unsupported) generation, and over the last decade, gas has increasingly replaced coal and oil. The graph below shows the relative proportions. The Government has identified the increasing dependence on gas for electricity generation as an issue and recognised that the promotion of renewable forms of generation is an important contributory factor in maintaining fuel diversity.



Growth of Renewable Generation

The graph overleaf shows the growth in renewable generation over the last twelve years; from 150MW in 1990 to over 1000MW in 2002. The volume of renewable energy produced by this generation has grown from less than 1TWh in 1990 to 6.4TWh in 2002 (total generation = approx. 330TWh). These numbers exclude approximately 1400MW of current large-scale

hydro plant, which is not recognised as ‘renewable’ within the Government’s support schemes.



Sources: New and Renewable Energy: Prospects in the UK for the 21st Century, and DTI Digest of UK Electricity Statistics 2003.

The Government has set a target of 10% of electricity generation to be produced from renewable sources by the year 2010. Whether this target will be met (or exceeded) will depend on many factors, such as the prevailing market price, Government policy, technological developments, planning and environmental constraints, infrastructure etc. The Scottish Executive has recently aspired to a target of 40% of renewable penetration (including large scale hydro) by 2020.

Because of the relatively non-firm nature of wind (the majority of the proposed renewable projects in Great Britain are wind) the electricity transmission and distribution system will not be able to support the unlimited growth of wind energy without incurring additional costs for back-up generation and system reinforcement. There is no definitive view at this stage as to the proportion of non-firm generation that the system could support economically, but it would be related to the amount of reserve already held on the system. In E&W for example, NGC holds enough generation in spinning reserve at any one time to cover an instantaneous failure of the largest unit on the system, 1.32GW. This spinning reserve would also cover a failure of the same magnitude of wind generation for example. However, given that the wind generators will be spread all over the country, the likelihood of it all failing simultaneously is very low, so the system could support several times that amount. For example, an ETSU study suggested 4GW of wind could be easily accommodated.

There is currently 18% (not including the mothballed generation sets that could come back at a relatively short notice) more generation on the system than the maximum demand, which it could also be argued would be there to cover the failure of non-firm renewable generation. Again, given that unreliable generation will be geographically dispersed, and that there is some correlation between wet and windy weather and periods of high demand, it should be possible to support even more than this without the need to hold more generation in reserve.

Cost of Renewable Generation

As an indication of the costs of the various types of renewable generation, Appendix C shows the prices bid under the Government’s former NFFO and SRO schemes. The cost of most forms of renewable generation steadily reduced over time until the advent of the current Renewable Obligation, in 2002. In E&W the average bid price fell from £65/MWh under NFFO1 to £27.10/MWh under NFFO5. This gives an indication as to the cost of renewable generation. In Scotland, the average bid price fell from £40.60/MWh to £33.70/MWh.

In comparison, the cost of a new Combined Cycle Gas Turbine (CCGT) plant, which is currently the lowest cost technology, we estimate to be £23.60/MWh.

In contrast, the prices in the NFPA auctions since the start of the Renewable Obligations show prices jumping to £64.50/MWh in February 2002 – an increase of £37.40/MWh from NFFO5. This indicates the premium that suppliers are prepared to pay to ensure that they meet the government's targets and a premium that generators are commanding in the market. The latest NFPA Auction in August 2003 demanded average prices for small scale hydro of £68.30/MWh and wind of £67/MWh respectively.

Transmission

The transmission system is the network of high voltage wires that delivers energy from power stations to the lower voltage, local distribution networks. In England and Wales, the National Grid Company (NGC) owns and operates the transmission system and in Scotland, Scottish Power (SP) and Scottish and Southern Energy (SSE) own and operate the systems in the south and north respectively. In E&W, the transmission system comprises 400kV and 275kV voltages, but in Scotland, it also includes 132kV lines.

In both E&W and Scotland, the income of the transmission companies is regulated by an inflation-related price control formula set by Ofgem, which is reviewed every four or five years. All three companies have an obligation to make their wires available to licensed suppliers and generators on non-discriminatory terms. Generators, distribution companies and any large customers connected to the transmission network are required to pay a connection fee to cover the physical connection assets. Generators and suppliers are also charged for using the transmission system. The transmission access regime is currently the subject of review by Ofgem.

Distribution

Electricity is delivered from the transmission system to local distribution networks, where it is transformed to lower voltages for delivery by underground cables or wires on poles to end-user customers. For household use, further transformers reduce the voltage to 240v. Distribution is the responsibility of 12 regional distributors in England and Wales and SP and SSE in Scotland. There have been a number of horizontal mergers between distribution companies, that have been driven by the benefits to be gained from economies of scale and to help deliver the efficiency savings demanded by tough price controls. The monopoly distribution function has recently become a separately licensed activity and distribution companies are not allowed to also own competitive generation or supply operations. In much the same way as for transmission, distribution charges are regulated by Ofgem via an inflation related formula. A distributor also recovers his allowed income from a combination of connection and use of system charges. Licence conditions very similar to those of the transmission companies are imposed on distributors in relation to providing access to the networks on non-discriminatory terms.

Supply

Since 1999, every electricity customer in Great Britain has been free to choose an electricity supplier and to switch supplier at a month's notice. A supplier is responsible for purchasing sufficient generation to meet his customers' demand (previously from the Pool, now from

generators) and pays for the conveyance of that power through the transmission and distribution networks. Suppliers then bill and collect money from customers according to the terms of their supply contract. The Public Electricity Suppliers (PES), who previously held regional monopoly franchises for both the distribution and supply of electricity, have now been forced to split the two functions between separate legal entities. The concept of a PES has been abolished by the 2000 Utilities Act.

In the last two years or so, there has been considerable integration between generation and supply companies and most of the larger generation businesses now also have a supply arm to hedge market risk. There has been some interest in the supply market from other customer-facing organisations, such as supermarkets and financial institutions, but their involvement has tended to be in partnership with the more established supply companies.

The Wholesale Markets

England and Wales

Prior to March 2001, all generators with a capacity greater than 50MW were obliged to sell their output into a competitive 'Pool', by submitting bids to the Market Operator (NGC) for every half hour of the day. NGC accepted bids in ascending order up to the volume required to meet the anticipated national demand. All generators were paid a uniform clearing price based on the marginal bid (the highest accepted bid). All suppliers were obliged to purchase from the Pool at a price reflecting the total cost of the generation purchased in that half hour, plus the cost of maintaining the system in balance. Prices were very volatile between half-hours, so most generators and suppliers struck Contracts for Difference (CfDs) around the Pool price in order to achieve price certainty. For both generators and suppliers, the Pool was a relatively low risk market mechanism. Most generators were 'price takers', and there was no penalty for failing to produce the energy required to fulfil an accepted bid. Suppliers simply paid for whatever they used, at a uniform price for each unit.

In contrast, the current wholesale trading arrangements, 'NETA', present both generators and suppliers with significant volume and price risk. These New Electricity Trading Arrangements look much more like any other commodity market. Since the abolition of the Pool in March 2001, generators are required to find purchasers for their output, and suppliers are required to find sellers from whom to purchase their customers' energy demand. Prices are negotiated bilaterally between the contract parties. A number of power exchanges have now emerged to facilitate medium and short term trading of standard products

The only significant element of the market that remains centrally organised is the Balancing Mechanism, analogous to the flexibility mechanism in the gas market. This is the means by which NGC purchases the residual energy required to maintain the system in balance in each half-hour. Generators and suppliers submit bids and offers for increments or decrements of generation or demand, up to 1 hour ahead of real time. Any bids/offers accepted by NGC are paid at their bid/offer price.

At Gate Closure, 1 hour ahead of real time, generators and suppliers submit their Final Physical Notification – notification of their intended physical position at real time. Generators and suppliers whose physical position differs from their contractual position at real time are 'cashed out' at prices broadly based on the costs incurred by NGC in the balancing mechanism. These imbalance prices are very volatile and are excessive in some periods. This is a deliberate feature of the new trading arrangements designed to incentivise market

participants to contract ahead. The calculation of imbalance prices has been designed such that the charge for being short of energy, the ‘system-buy price’, is significantly higher than the price received for being long, the ‘system sell’ price¹⁶, and so the sum of the cashout charges never matches. The excess (or shortfall) is therefore returned to (or recovered from) all generators and suppliers in proportion to their metered volumes in each half-hour.

The final element of the trading arrangements is the contractual arrangements that NGC puts in place to secure reserve energy and ancillary services to maintain system integrity. The cost of these contracts, plus NGC’s balancing mechanism cost, is recovered from both generators and suppliers dependent on their metered volume in each half-hour. This charge is termed the Balancing Services Use of System charge (BSUoS).

Scotland

ScottishPower (SP) and Scottish and Southern Energy (SSE) remain vertically integrated groups of companies, performing all four core functions – generation, transmission, distribution and supply – although these individual businesses are now held in separate legal subsidiaries. The majority of generation in Scotland is owned by SP, SSE and the two nuclear stations are owned by British Energy. However, the ownership of the output of the main power stations is reallocated through a series of contracts put in place at privatisation. Under these ‘restructuring’ contracts, SSE is allocated a proportion of SP’s coal stations and 25% of the nuclear output; SP is allocated a share of SSE’s gas/oil station and its hydro plant and the remaining 75% of the nuclear output. There is a significant surplus of generating capacity in Scotland and there has been little serious interest from new entrants of any significant size.

There is no wholesale market in Scotland. As a market proxy, ScottishPower and Scottish and Southern Energy were obliged to make generation available to competitive suppliers at a regulated price derived from the E&W Pool price. This continues to be the case, and the Scottish Wholesale price is now derived from market prices emerging under the NETA arrangements in E&W. In order to accommodate what little independent generation there is in Scotland (including any imports from the E&W market), SP and SSE are obliged to provide the balancing energy requirements of independent operators. Again, the price of this ‘top-up’ and ‘spill’ is regulated by reference to E&W market prices.

Whilst the lack of a wholesale market has effectively prevented generators in E&W exporting generation into Scotland, SP and SSE have, since privatisation, exported surplus power from Scotland into the E&W market over the Scotland/E&W Interconnector. In another restructuring contract, the original capacity of the Interconnector (800MW) was allocated between SP and SSE. Since then, the two companies have increased the capacity (to 2000MW) in order to exploit commercial opportunities in E&W. Rights of access to the Interconnector have been the subject of regulatory review for a number of years, as the lack of transparent arrangements for third party access are considered to be a considerable deterrent to new generation in Scotland. As yet there is no lasting solution, although temporary arrangements have been put in place which should allow third party generators to gain access to the Interconnector for a proportion of their total output. However, under the existing arrangements, a new generator in Scotland would have to find a buyer within Scotland for most of its output.

¹⁶ The main price (i.e. SSP when long and SBP when short) is set at the volume weighted average price of bids and offers required to meet the actual net imbalance. The reverse price is set to a “market price.”

In practice, the Scottish market remains dominated by SP and SSE. The restructuring contracts and the Interconnector arrangements have made it almost impossible for new generators to enter the market. There is little competition between the incumbents. In the supply market, which has opened in tandem with E&W, competition has been much slower to develop in Scotland than in E&W and the strongest competitors remain SP and SSE in each other's areas although Centrica has become more significant lately, under the Scottish Gas brand.

For these reasons, amongst others, Ofgem has proposed the creation of GB-wide trading arrangements, under the BETTA proposals. The scheduled implementation date for BETTA is April 2005.

A GB-Wide Market

For a number of years there has been ongoing debate between the regulator and interested parties about the establishment of a market in Scotland that would mirror the NETA arrangements in E&W. It was envisaged that the two markets would then interact over the Interconnector, access to which would be open to all and non-discriminatory. However, it was always doubtful whether it would be possible to establish competition in a market the size of Scotland, which was so heavily dominated by SP and SSE and which was tied up by the restructuring contracts. It was concluded that a single GB-wide market, which effectively extends NETA to Scotland, would be the most effective way of introducing wholesale competition to Scotland.

Progress towards a GB-wide market has been slow and has been over-shadowed by the development problems that delayed the implementation of NETA. It has been further complicated by the need to integrate the transmission arrangements of the three Grid companies in support of a unified market. One of the key issues with NETA was the inappropriateness of the existing arrangements for dealing with transmission system constraints, the restrictions on the grid caused by inadequate transmission capacity to deal with the physical flows. The Interconnector is considered to be such a constraint, which currently restricts the quantity of power that can flow south from Scotland into England (although in practice, this is a contractual constraint only and the physical restriction is in fact further south on the system). In a unified market, the concept of an Interconnector should disappear, but a mechanism will be required for allocating scarce transmission capacity between the parties wishing to transport power from north to south.

The Political and Regulatory Climate

The Kyoto Protocol

At Kyoto in December 1997, developed countries agreed to reduce emissions of a basket of the six main greenhouse gases to 5.2% below 1990 levels during the period 2008-2012. The Kyoto Protocol permits countries to undertake commitments jointly by forming a 'bubble'. Under this arrangement, the European Community agreed jointly to an 8% reduction. In June 1998 this target was shared out between Member States (the 'Burden Sharing Agreement'). The UK agreed a reduction of 12.5%. In the Energy White Paper, the UK Government also set out a domestic goal of reducing carbon dioxide emissions by 20% below 1990 levels by 2010.

EU Energy Policy

The EU's energy policy objectives are three pronged

- to meet environmental targets set under the Kyoto Protocol;
- to protect the security of Europe's energy supply by reducing its increasing dependence on energy imports; and
- the introduction of internal energy markets.

Clearly there is some tension between them. Falling energy prices resulting from the introduction of competition undermine policies to curtail increasing demand and combat climate change. Similarly, market pressures on electricity generation change the competitiveness of the various sources of electricity production.

Environmental Targets

The White Paper on Renewable Energy Sources¹⁷ sets out a commitment to double the share of renewable energies in gross domestic energy consumption in the EU by 2010. The plans to increase the share of energy consumption (comprising electricity, heat and biofuels) from renewables from the present 6% to 12% translates into a 22.1% share of electricity produced from renewable energy sources.

The European Parliament confirmed that binding national renewable energy targets are essential to meeting the European targets.¹⁸ This is reiterated in the Directive on renewable energy.¹⁹ The main feature of the directive is a legally binding obligation on Member States to set national objectives for future domestic consumption of electricity produced from renewable sources of energy. Member States are required to define quantitative objectives, which the Commission will monitor in relation to EU targets.

The principles of subsidiarity and proportionality allow member states to choose how to implement the regimes to achieve their targets (see below). The directive recognises that Member States operate different mechanisms for the support of renewables, but ultimately the Commission may make firm proposals for a community-wide framework for the support of renewables.

Security of Supply

The core tenet of the Commission's strategy outlined in the Green Paper on security of supply²⁰ is demand reduction and diversification in favour of non-polluting energy sources. It highlights the value of taxation measures to steer demand towards better controlled consumption which is more respectful of the environment. It also points towards the need for financial measures to encourage the development of new and renewable technologies and reiterates the need to increase the proportion of electricity generated from renewables to 22%.

Internal Energy Markets

Existing Directives require Member States to open specified proportions of their electricity and gas markets to competition. Whilst it has met with strong opposition, the Commission continues to propose full market opening by 2005.

¹⁷ White Paper on Renewable Energy Sources COM(97) 599 final.

¹⁸ Resolution A5-0078/2000 30th March 2000.

¹⁹ Directive 2001/77/EC of the European parliament and of the Council on the promotion of electricity from renewable energy sources in the internal electricity market, 27th September 2001.

²⁰ Green Paper 'Towards a European Strategy for the Security of Energy Supply

UK Energy Policy

The Government's energy policy has traditionally been characterised as a three-way interaction between economic objectives (low costs, innovation, improved supply/demand relationships), environmental issues (increasingly concentrating on long-run issues of climate change) and security of supply.

During the 1990s, the economic objectives of energy policy were the most actively pursued. Costs and price reductions were achieved primarily through the introduction of competition, where possible, and by price regulating the monopoly electricity and gas networks. A mixture of chance (e.g. low world fossil fuel prices, cost-effective replacement of coal by gas) and design (competitive and regulatory downward pressure on costs) meant that the pursuit of economic objectives was accompanied by an improved environmental performance and (so far) enhanced fuel supply diversity.

More recently, however, the Government's energy policy activities have focussed mainly on reducing the environmental impact of energy consumption and improving the security and diversity of energy supplies.

Key policies to reduce the environmental impacts of energy consumption have arisen through the implementation of the UK Climate Change Programme. Some of these measures include:

- the Non-Fossil Fuel Obligation and the Scottish Renewables Obligation, replaced by the Renewables Obligation and the Renewables Obligation Scotland in 2002;
- implementation of the Kyoto Protocol of the UN Framework Convention on Climate Change;
- a target for renewable electricity of 10% of supply by 2010;
- the renewables R & D programme;
- a target for the use of Combined Heat and Power (CHP);
- the Climate Change Levy (CCL) and associated agreements to improve energy efficiency in energy intensive sectors;
- proposals for a UK emissions trading scheme;
- enhanced capital allowances for energy saving products; and
- the establishment of capital grant schemes to support specific types of renewable generation.

Policies to improve the security and diversity of energy supplies have included:

- a temporary moratorium on the construction of gas-fired power stations, subsequently replaced by a "stricter consents policy";
- measures to promote energy efficiency and renewables; and
- reform of the operation of the electricity market to remove distortions which were perceived to encourage investment in gas-fired power generation at the expense of existing coal fired plant.

Both of these strands of energy policy have placed an increasing emphasis on the provision of renewable energy.

Recent Reviews

In June 2001, the Government appointed the Cabinet Office's Policy and Innovation Unit (PIU) to undertake a GB energy review, looking to 2020 and beyond to 2050. The PIU's scope was wide ranging, but its priorities were to meet the challenge of global warming, while ensuring secure, diverse and reliable energy supplies at a competitive price. It looked at the roles of coal, gas, oil and renewables in the energy balance and considered the role of nuclear energy in meeting environmental and security of supply objectives.

The PIU reported in February 2002 recommending a policy framework that would address the three objectives of sustainable development – economic, environmental and social – as well as energy security.

The PIU's report also recommended a number of short, medium and long term actions, the first of which has recently been undertaken – public consultation on Energy Policy. The consultation, which ended on 13 September 2002, set out the key energy issues that Government needed to consider and the responses and findings were used as the basis of the White Paper on Energy Policy produced early in 2003. As well as security of supply and environmental issues, the report addressed:

- the role a UK energy policy should play within an EU and international context;
- what measures are needed to achieve PIU targets for improvement in energy efficiency;
- are the proposed targets for renewable energy realistic and what measures will be required to achieve them, and at what impact;
- what is needed to provide a stable framework for necessary investment in the transmission, distribution and trading sectors;
- the future role of nuclear energy and the confidence level that there will be available alternatives by 2020 – if not, what is needed to keep the nuclear option open;
- how can we ensure that the international gas/oil market will deliver access to supplies at affordable prices in future;
- assessing the coal option - how will it evolve over 10/20 years including availability of cleaner coal technologies;
- does the proposed low carbon economy provide UK industry with competitive advantage and benefits and what measures will be required to do so;
- moving towards a zero (carbon) emissions transport system – what needs to be done?;
- is there a need to change or strengthen the present institutional arrangements in Government or its delivery bodies to deliver the intended results?

Security of Supply

Liberalisation and restructuring of international energy markets, as well as the realisation that the UK will shortly become a net importer of gas, has led to various initiatives aimed at addressing the issues surrounding security of energy supply in the UK.

An EU Green Paper on European security of energy supply has been published and is currently under review by member countries who, like the UK, are attempting to consult on, and address, the issues raised as part of their own energy policy reviews. International security of supply will be enhanced by ratification of the Energy Charter Treaty (ECT) by all signatories to the Treaty, bringing about, amongst other aspects, non-discriminatory third party access to, and investment in, international oil and gas pipelines.

In the UK a Government Trade and Industry Committee has (January 2002) published its second report on security of energy supply.

Its key relevant findings are that:

- Gas Network - concerns over bottlenecks in, and the extent of, the national and local gas transmission system seem to be well-founded as do concerns over interruptions as a result of limited storage capacity.
- Electricity network - the current design of, and level of charges for connection to, the electricity grid presents several challenges to the renewable energy (and combined heat and power) industries. Whilst these may be overcome as market conditions develop, this is unlikely to occur in the timeframe required by Government targets.
- The Role of the Regulator in Investment - the operation of RPI - X should be reviewed to ensure that companies are given sufficient leeway to invest in maintaining and developing a robust energy infrastructure.
- Diversity of fuel supply - market forces should be allowed to determine the appropriate mix of fuels for electricity generation, although that need not prevent intervention by the Government and the Regulator to ensure that long-term security of supply is maintained. However, even if the exact mix of fuels is left to market forces, it is arguable that the Government should at the very least take no action that closes off options, and perhaps should be prepared to make adjustments to its policies to keep options open.
- Strategic planning - a longer strategic planning timeframe should be considered, to allow for the long term nature of investments in infrastructure and generation plant.
- New Electricity Trading Arrangements – problems arising from NETA epitomise the conflicts inherent in trying to achieve an energy policy that simultaneously guarantees security of supply, delivers environmental objectives and combats fuel poverty. Although not advocating specific amendments to NETA arrangements, a ‘wait and see’ approach does not seem likely to stem — let alone reverse — the dramatic decline in both the output and the profitability of small scale generators.
- Generating capacity – Government or Ofgem should take a strategic view about what level of reserve capacity is necessary — presumably, slightly more than 20% — and should be prepared to use market mechanisms to encourage the construction of extra capacity if necessary.
- Planning - planning problems and the planning system currently forms a major obstacle to the Government's achieving its energy policy in respect of both security of supply and environmental objectives and that planning guidance should be strengthened in favour of granting permission to energy developments. Revised planning guidelines are currently being developed for implementation early in 2003.

- Industrial customers - concerns about the effect of energy prices on the competitive position of UK industry are valid, compounded by the impact of climate change levy and the current situation of the CHP sector
- Renewable Energy – achieving the targeted 10% of power generation from renewable sources, would be a helpful contribution to achieving greater security of supply, as well as meeting environmental objectives.
- Combined Heat and Power – radical action is required if the Government's target of 10GWe of CHP production by 2010 is to be met.
- Coal industry – without Government intervention or support (through clean coal technology demonstration plants) it is likely that coal-fired generation will end in this country.
- Renewable power technologies - capital grants are not of equal assistance to all renewable technologies and further discussions should be carried out on measures that might be taken to ensure an even-handed approach to such assistance, especially to immature technologies that might not yet benefit from the Renewables Obligation. This might include help with development costs and with market stimulation programmes.

A House of Lords Select Committee also investigated , amongst other issues, security of supply. In its report (of February 2002) key relevant findings included:

- the liberalisation of energy markets will help promote energy security but increased emphasis should be on risk management;
- the EC's priorities should be to complete a liberalised single market in energy, facilitate energy interconnections between Member States and to encourage stable investment conditions in producer countries;
- the Government and the Commission should regard the threat of terrorist attack as further underlining the need to avoid over-dependence on any single energy facility or geographical source;
- Market liberalising is not at conflict with improved security of supply but effective access to electricity wires and gas pipelines and storage is essential;
- research and development should be encouraged on issues relating to the public acceptability of nuclear power generation and the European Union should aim at least to retain its present proportion of nuclear power generation and should examine what is necessary to achieve this;
- the Government should maintain the United Kingdom's present ability to produce no less than 20 per cent of United Kingdom electricity demand from nuclear power generation, and proceed as a matter of urgency to agree a method of dealing with nuclear waste, and an appropriate planning policy for new nuclear power stations on existing sites;
- a study of the options designed to ensure a comparable level of energy security in all Member States, arising from dependence on key gas transmission systems, should be undertaken and that all European Union Member States be required to have comparable standards of emergency preparedness in relation to gas emergencies, to ensure that gas flows are not interrupted;
- faster progress should be made towards full gas market liberalisation, rather than rely on very large long-term contracts, to help create the conditions for the substantial

investments needed in producing countries. The EC must continue to encourage gas interconnections and inter-operability between Member States so that a larger, effective market is created;

- the Government should use its influence to bring about the establishment of inter-governmental agreements to ensure that there are common infrastructure standards
- Europe should avoid handicapping coal unnecessarily in view of its contribution to energy security but should instead focus on support for coal in future by the development of clean coal technologies;
- the United Kingdom Government and the European Union should encourage investment in renewable energy sources but recognise that they cannot rely on renewable energy sources excessively as a major contribution to the environmental security challenges in the energy sector;
- the European Union Member States and the Commission should keep the electricity regulatory system under review to ensure that it promotes security of supply;
- the Government should encourage other Member States to move in the direction of taxation that reflects the environmental impact of energy use.

In June 2002, the DTI-Ofgem Joint Energy Security of Supply Working Group (JESS) published its first report. The group's Terms of Reference are:

- to assess the available data relevant to security of supply, to identify the gaps in that data and develop appropriate indicators;
- to monitor at a strategic level, over a timescale of at least seven years ahead:
 - (a) the availability of supplies of gas;
 - (b) the availability of supplies of electricity and fuels used for electricity generation;
 - (c) the adequacy of generating capacity; and
 - (d) the adequacy of the UK's gas and electricity infrastructure;
- to assess whether appropriate market-based mechanisms are bringing forward timely investment to address any weaknesses in the supply chain that are anticipated;
- to identify relevant policy issues and consider implications;

A range of interested parties have attended and contributed to the group including staff from DTI, Ofgem, the Scottish Executive, the Performance and Innovation Unit (PIU), National Grid Company (NGC), Transco and the Foreign Office.

In its first work period and report the Group has concentrated on three areas:

- the development of indicators of security of supply;
- the development of a structured approach to understanding interactions between the factors that influence security of supply;
- gas supply and infrastructure issues.

The group has also begun to examine the implications of the PIU Energy Review for its work.

The initial work of the Group has focused mostly on gas markets. The group also developed its electricity system remit and explored further interactions between the gas and electricity systems, including:

- follow-up to the PIU Energy Review recommendations;
- the results of the DTI-Ofgem project on understanding interactions in security of supply;
- energy infrastructure and investment markets, including the role of the planning system;
- continued work on generating capacity as started in the indicators work;
- the results of a DTI study on the resilience and emergency preparedness of the electricity transmission and distribution system.

The Scotland Office and the Scottish Executive

Energy Policy has both reserved and devolved components. The devolved components of energy policy include the granting of power station consents, planning and the environment and the promotion of renewable energy.

The Scottish Executive's current renewable energy policy is for Scotland to play a major part in meeting the 10% UK renewables targets. The published target is for 18% of Scottish supply to be met by renewables by 2010. Meeting this target is likely to require a significant increase in the amount of generation connected to the north of Scotland transmission network, where the system is weak and already fully utilised in parts. We understand that the Scottish Executive is already taking action to assess the position, but it seems likely that if significant system reinforcement is necessary it will require Government support and, potentially, funding.

In addition to this the Executive has recently announced a target of 40% of its electricity needs from renewable sources by 2020. Clearly this provides significant further support to renewable energy, but to achieve this target will require even more significant system reinforcement.

The Scottish Executive recently announced a consultation exercise (responses by Friday 21 November 2003) on the Renewables Obligation (Scotland) which is likely to lead to changes in the treatment of co-firing of biomass with other fuels, for example in existing coal plant, and to extend the benefits of the scheme to small generators such as photovoltaic and small wind generators.

ANNEX C - SUPPORT SCHEMES FOR RENEWABLES

NFFO/SRO

Renewable generation has been supported by specific Government schemes since privatisation. In E&W, the Non-Fossil Fuel Obligation (NFFO) and in Scotland the Scottish Renewables Obligation (SRO) comprised statutory Orders which provided for the purchase by the Public Electricity Suppliers (PESs) of particular types and volumes of renewable energy. Contracts for the construction of new renewable generators were let via what were effectively competitive auctions. For interest, the prices paid under the various NFFO and SRO Orders are attached in annex D. The excess costs of these renewable generator contracts over and above the market price (the Pool price in E&W and the avoidable cost of generation in Scotland) was recovered from all customers through the Fossil Fuel Levy. The number of NFFO and SRO projects actually reaching fruition has been relatively low. This, together with other structural changes in the industry (the abolition of PESs for example) caused the Government to re-think its approach to supporting renewables. There will be no further NFFO or SRO Orders made. In its place the Renewables Obligation and Renewables Obligation Scotland have been brought in to support renewable generation. The following section considers this legislation.

The Renewables Obligation (RO) and the Renewables Obligation Scotland (ROS)

Draft legislation and a final consultation paper were issued by the DTI and the Scottish Executive early in August 2001, which proposed a different, more market-based approach to the support of renewable generation from April 2002. In contrast to the NFFO and SRO schemes, which gave direct financial support to specified projects, the Renewable Obligation (for E&W) and the Renewable Obligation Scotland obliges all suppliers to demonstrate that they have purchased a certain proportion of their energy from renewable sources of generation. In theory, suppliers will be able to recover the additional costs of purchasing the more expensive renewable generation from their customers.

Level of Obligation

The level of the RO and ROS are due to increase annually, from 3% in the first year to 10.4% by 2011, according to the following table:

Table B2: Level of the Renewables Obligation

Period	Estimated Sales by Licensed Suppliers (GB)	Sales of Renewables under RO and ROS Obligation	Obligation as % of Sales
	TWh	TWh	
2002/2003	313.9	9.4	3.0
2003/2004	316.2	13.5	4.3
2004/2005	318.7	15.6	4.9
2005/2006	320.6	17.7	5.5
2006/2007	321.4	21.5	6.7
2007/2008	322.2	25.4	7.9
2008/2009	323.0	29.4	9.1
2009/2010	323.8	31.5	9.7

2010/2011	324.3	33.6	10.4
2011/12 to 2026/27			10.4

Accreditation

Under the scheme, renewable generators are required to become accredited and are issued with a Renewable Obligation Certificate (ROC) for every MWh of energy produced. The generators may then sell the energy and the associated certificate to the same supplier, or may trade the ROC separately from the energy. Each ROC has a specific number detailing the type of renewable resource, the period that the certificate covers and a unique identifier for the station that produced the power. The requirement on suppliers is to demonstrate that they have purchased sufficient ROCs to meet their obligation. Suppliers are able to 'bank' a proportion of ROCs for redemption at a later date.

Banking of ROCs

The most important concept of the RO scheme, is that the ROCs themselves are tradable separately from the electricity that is produced. In other words, a supplier can achieve its obligation by purchasing ROCs directly from the generator or from another party so long as the supplier has sufficient ROCs to account for its total obligation at the end of each period. Likewise, a generator can sell its ROCs directly to a supplier or a third party.

This has led to the banking of ROCs. This works by allowing a supplier to 'bank' any extra ROCs that they may receive in one year against their allocation in the next. For example, if a supplier supplies more renewable energy than the minimum set out in the allocation for that year, they may keep the extra ROCs associated with this supply to redeem at a later date. There is a limit of 25% placed on the amount of a supplier's obligation that can be redeemed from a previous period.

Buy-out Payments

The significance of the RO and ROS for the value of renewable generation is the level of the buy-out payment. This is the cost that suppliers avoid by purchasing ROCs. Suppliers are incentivised to purchase ROCs rather than simply buy themselves out, because the proceeds of the buy-out payments are recycled to suppliers in proportion to the number of ROCs they have surrendered in each period. As long as there are insufficient ROCs to meet the total suppliers' obligation (for example less than 9.4TWh in 2002/03), the value of a ROC will be greater than the buy out price of £30/MWh. This is income to renewable generators over and above the income derived from selling the energy in the market. The buy-out price is set for the first period in the obligation and rises annually with RPI. The Government has also made an explicit commitment that this price will not be decreased over the life of the obligation. However, when the amount of ROCs available exceeds the total requirements of suppliers, the value will inevitably fall below the £30/MWh level and the price is likely to be determined by bilateral negotiation between renewable generator and supplier.

For the first year of the RO/ROS, the obligation on suppliers was 3%, which equated to the supply of 9.4TWh of renewable energy GB-wide. Approximately 5.5TWh of ROCs were redeemed by suppliers over that period, equating to a shortfall of 3.9TWh (41%).

Recycle Value

The money raised from the buy-out is recycled to the suppliers according to the number of ROCs that each supplier surrenders within the year. Therefore, if a supplier chooses only the buy out option, they will receive no extra payment from the recycling thus leaving themselves

potentially at a financial disadvantage compared to other suppliers who have purchased 100% from ROCs.

From the first year of operation it is evident that there is a shortfall and the value of ROCs traded around the £45/MWh level, reflecting suppliers recognition of the recycle payments.

Climate Change Levy

The Climate Change Levy (CCL) came into force in the UK on the 1st April 2001. The CCL is payable by non-domestic energy users and collected by suppliers. The levy on electricity is 0.43p/kWh but electricity produced by renewable and good quality CHP is levy exempt. The aim of the levy is to encourage efficient energy use and the promotion of energy from low-emission sources, by effectively increasing the cost of electricity purchased from fossil-fuelled sources. Wholesale transactions of electricity are not liable to CCL; it is only payable on energy supplied to non-domestic end-users.

As with the RO/ROS, renewable generators require to be accredited for CCL avoidance, although, unlike the RO/ROS, the 'greenness' of the energy cannot currently²¹ be traded separately from the energy.

The exemption from the tax of renewable and CHP generation increases its value to energy users. By purchasing renewable or CHP generation, a consumer avoids the need to pay the £0.43/kWh CCL. The value of renewable generation is therefore a little under £0.43/kWh. Again, the price that a consumer (or his supplier) will be prepared to pay will be negotiated between the parties and will be influenced by the demand/supply balance. The demand of the non-domestic market in GB is approximately 200TWh per annum. Existing renewables produce approximately 6.6TWh. It seems unlikely that supply will ever exceed demand. However, the value of LECs (Levy Exemption Certificates) appears to be trading at approximately 80% of the avoided tax.

Emissions Trading

The final version of the European Emissions Trading Directive was approved by the European Parliament on the 2nd July and accepted by the EU Council on the 22nd July 2003. Its formal adoption is imminent at the time of writing and Member States will have only until 31st December 2003 to incorporate it into national law.

The Directive will establish a cap on emissions of carbon dioxide (CO₂) from several major industry sectors across Europe: power, heat and steam generation; oil refineries; iron and steel; pulp and paper; and building materials (in particular, cement). These sectors account for an estimated 40-45% of European CO₂ emissions. The cap will be imposed from 2005-2007 with limited opt-outs allowed for individual installations, subject to equivalent national regulation, with the main second phase being in parallel with the first Kyoto commitment period of 2008-2012.

Owners of facilities in these sectors will be allocated a certain number of 'allowances to emit', with the total number allocated being equal to the aggregate cap on emissions. At the end of each year, each facility will need to hold enough permits to cover its actual emissions, following which there will be a 4-month 'true-up' period at the beginning of the subsequent

²¹ HM Customs and Excise are currently consulting with industry players on the potential tradability of levy exemption certificates (LECs).

year. If any facility is not in compliance by the end of that period, financial penalties of €40/tonne in the first phase, and €100/tonne in the second phase, will apply. In addition, facilities will be 'named and shamed' and expected to make good any shortfall in the subsequent year.

As the cap will be set lower than projected emissions, there will be a shortage of allowances to emit, and industry participants will be able to trade amongst themselves to obtain emission reductions at the cheapest possible price.

In the energy sector, the scheme will cover combustion activities with a rated thermal input exceeding 20 MW (except hazardous waste or municipal waste installations) mineral oil refineries and coke ovens. The definition of 'installation' will be consistent with the IPPC Directive. From 2005, Member States will be allowed limited unilateral inclusion of installations below the minimum thresholds and from 2008, to include gases other than CO₂.

Power prices will inevitably rise as a consequence of the EU scheme. Regardless of the allocation methodology (which will in part determine relative winners and losers for the scheme) there will be a cost of carbon incorporated in the power price, depending on the emissions intensity of the generators on the margin. Renewable and nuclear generators will not receive free allowances, but may be expected to benefit from the consequential general rise in power prices.

We have estimated the impact of emissions constraints to add around £0.70/MWh to power prices, but as coal plant running reduces in response due carbon trading and other structural changes this impact is likely to reduce. We are presently forecasting that the impact of emissions constraints will be around £0.10 MWh in 2010. In addition, the impact of carbon trading from 2005 will put increasing upward pressure on power prices. Whilst the direct impact on power prices will not be as rapid as the increase in carbon prices due to structural change to lower carbon intensity generation technologies, carbon will have significant contribution to wholesale prices.

ANNEX D – RENEWABLE ENERGY PRICES

England and Wales

The following table shows the range and average bid prices in each round of the former Non-Fossil Fuel Obligation.

Table D3: Bid Prices For The Former Non-Fossil Fuel Obligation

	NFFO1 - 1990	NFFO2 - 1992	NFFO3 - 1994	NFFO4 - 1997	NFFO5 - 1998
Technology Band	Bid Price Range (p/kWh)	Bid Price Range and Average (p/kWh)	Bid Price Range and Average (p/kWh)	Bid Price Range and Average (p/kWh)	Bid Price Range and Average (p/kWh)
Wind	5.75 – 10.00	6.39 – 11.00 9.97	3.98 – 5.99 4.43	3.11 – 4.95 3.56	2.43 – 3.10 2.88 (>0.995MW) 3.40 – 4.60 4.18 (<=0.995MW)
Hydro	3.85 – 7.5	3.40 – 6.00 5.06	4.25 – 4.85 4.46	3.80 – 4.40 4.25	3.85 – 4.35 4.08
Landfill Gas	3.6 – 6.4	3.96 – 5.70 4.75	3.29 – 4.00 3.76	2.80 – 3.20 3.01	2.59 – 2.90 2.73
Waste Combustion	5.06 – 6.00	5.50 – 6.55 6.20	3.48 – 4.00 3.89	2.66 – 2.80 2.75	2.39 – 2.49 2.43
Other Combustion	4.43 – 6.00	4.00 – 5.90 5.42			
Sewage Gas	4.40 – 6.00	4.80 – 5.90 5.16			
Energy Crops			4.90 – 8.75 5.62	5.49 – 5.79 5.51	
Mun and Ind Waste with CHP				2.79 – 3.40 3.23	2.34 – 2.90 2.63
Total	3.60 – 10.00 6.50	3.40 – 11.00 6.61/7.20	3.29 – 8.75 4.35	2.66 – 5.79 3.46	2.71

Notes

1. In NFFO1, NFFO3 & NFFO4 projects were paid their bid price. In NFFO2, in each band all projects were paid the marginal price (the “band price”).
2. In NFFO1 6.50p/kWh was the average price paid. In NFFO3 4.35p/kWh was the average price paid. In NFFO4 3.46p/kWh was the average price paid.
3. Prices referred to are actual prices in money of the day.
4. In NFFO2 6.61p/kWh was the average bid price, 7.20p/kWh was the average price paid.
5. In NFFO1 & NFFO2 prices are for output up to 1998; in NFFO3 and NFFO4 prices are for output for up to 15 years from commissioning.

Since the advent of the RO and ROS, prices paid for renewable generation has increased dramatically. The Non-Fossil Fuel Purchasing Agency (NFPA) holds auctions of green electricity from NFFO contracts every six months and the average prices for the different

technologies in the auctions completed in 2002 and 2003 are illustrated in the following table. It is important to note that generators still only get their pre-agreed NFFO contract price rather than the prices being paid by suppliers. In some cases the price obtained in the NFFO auctions are higher than the pre-agreed NFFO contract. This has created a surplus in the NFFO fund²² and has resulted in the fossil fuel levy becoming zero.

Table D4: NFFO Auction Prices

	Feb-01	Sep-01	Feb-02	Aug-02	Feb-03	Aug-03
TECHNOLOGY BAND	Average Price	Average Price	Average Price	Average Price	Average Price	Average Price
	p/kWh	p/kWh	p/kWh	p/kWh	p/kWh	p/kWh
Biomass	1.85	2.61	6.52	5.88	3.68	5.43
Hydro	1.75	2.81	6.40	6.69	6.45	6.83
Landfill Gas	1.90	2.84	6.74	6.76	6.56	7.13
Wind	1.75	2.84	6.31	6.65	6.41	6.70
Average	1.81	2.78	6.49	6.50	5.78	6.52

The differences in price between the NFFO auctions and the prices paid through the NFFO since the advent of the RO indicate the worth of 'green' energy in today's market.

Scotland

The prices for the output from the Scottish Renewable Orders are tabulated below.

Table D5: SRO Prices

	SRO1 - 1994	SRO2 - 1997	SRO3 - 1999
Technology Band	Bid Price Range and Average (p/kWh)	Bid Price Range and Average (p/kWh)	Bid Price Range and Average (p/kWh)
Wind	3.79 – 4.17 4.01	2.74 – 2.94 2.86	1.89 – 3.16 2.51
Small Wind			2.63 – 4.98 3.37 (small)
Hydro	3.24 – 4.15 3.83	3.45 – 3.76 3.64	3.40 – 6.20 3.96
Waste to Energy	3.85 – 3.86 3.86	2.70 – 3.20 3.04	2.64 – 4.00 3.07
Biomass	4.79	6.88	4.69 – 8.46 5.41
Wave			5.95 – 7.00 6.90
Total	3.24 – 4.79 4.06	2.70 – 6.88 3.10	1.89 – 8.46 3.37

Notes

- Prices referred to are actual prices in money of the day.

The NFFO also auction the Renewable Obligation certificates from the generators located in Scotland. However, as both Scottish Power and Scottish and Southern have an agreement to

²² A decision on this surplus has yet to be forthcoming by government, but it is most likely that it will go in supporting near market "renewable" technologies.

take the generated electricity, only the ROCs are auctioned. The table below shows the prices achieved in Scotland.

Table D6: NFPAS Auction Prices

Oct-02	Jan-03	Apr-03	Jul-03	Oct-03
Average Price	Average Price	Average Price	Average Price	Average Price
p/kWh	p/kWh	p/kWh	p/kWh	p/kWh
4.71	4.75	4.68	4.82	4.59

ANNEX E – CURRENT TNUoS CHARGES IN GREAT BRITAIN

All electricity market players who use the Transmission System are liable to charges, named Transmission Network Use of System Charges (TNUoS). These TNUoS charges are different for players who put electricity on to the grid (Generators) and players who take electricity from the grid (Demand) and also different dependant on where they are situated in the country.

The current TNUoS charges in Great Britain are given in the tables below.

Demand Zone	Zone Area	Demand Tariff £/kW
1	Northern	0.581892
2	North West	5.036761
3	Yorkshire	4.466802
4	North Wales & Mersey	5.13453
5	East Midlands	7.352609
6	Midlands	9.11032
7	Eastern	8.470207
8	South Wales	13.59572
9	South East	10.23217
10	London	13.50298
11	Southern	12.68099
12	South Western	15.84405
	Scottish Power	6.00
	Scottish & Southern	9.68

ANNEX E
Current TNUs charges in Great Britain

Generation Zone	Zone Area	Generation Tariff £ /kW
1	North	9.070559
2	Humberside	5.371999
3	N Yorks & N Lancs	5.043993
4	S Yorks & S Lancs	3.84825
5	North Wales	5.559611
6	West Midlands	1.421129
7	Rest of Mids & Anglia	1.881197
8	South Wales	-4.304565
9	Wiltshire	-2.452289
10	Greater London	-0.202412
11	Estuary	0.6254
12	Inner London	-10.54491
13	South Coast	-3.628069
14	Wessex	-5.789249
15	Peninsula	-10.142785
	Scottish Power	2.45
	Scottish & Southern	5.44
		(+5.52 for new generators)

ANNEX F – PROFIT/LOSS STATEMENTS

The following pages show the profit/loss statements for each of the typical renewable developments analysed.

ANNEX F Profit/Loss Statements

Profit Statement - 100MW Onshore Wind Farm, Utility Developer

	Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	
Income																											
Electricity Income	£M	0.00	0.00	0.00	0.00	0.68	3.73	6.29	6.73	6.87	6.99	6.88	7.31	7.73	8.72	9.15	9.59	10.06	10.54	11.04	11.56	12.10	12.66	13.25	10.39	3.62	
ROC Income	£M	0.00	0.00	0.00	0.00	1.19	7.35	10.08	8.06	8.29	8.52	8.76	9.01	9.26	9.52	9.79	10.07	10.35	10.64	10.94	11.25	11.57	11.90	12.23	9.43	3.23	
CCL Income	£M	0.00	0.00	0.00	0.00	0.11	0.54	0.89	0.92	0.94	0.97	1.00	1.02	1.05	1.08	1.11	1.14	1.18	1.21	1.24	1.28	1.31	1.35	1.39	1.07	0.37	
Total Income	£M	0.00	0.00	0.00	0.00	1.98	11.62	17.26	15.71	16.10	16.47	16.64	17.34	18.04	19.33	20.05	20.81	21.58	22.39	23.23	24.09	24.99	25.91	26.87	20.90	7.22	
Annual Costs																											
Routine O&M	£M	0.00	0.00	0.00	0.00	1.07	1.10	1.13	1.17	1.20	1.23	1.27	1.30	1.34	1.38	1.42	1.46	1.50	1.54	1.58	1.63	1.67	1.72	1.77	1.82	1.87	
Transmission Use of System Charge	£M	0.00	0.00	0.00	0.00	0.95	1.95	2.01	2.06	2.12	2.18	2.24	2.31	2.37	2.44	2.51	2.58	2.65	2.73	2.80	2.88	2.96	3.05	3.13	3.22	1.66	
Balancing Services Use of System Cost Rates	£M	0.00	0.00	0.00	0.00	0.02	0.12	0.20	0.21	0.22	0.22	0.23	0.23	0.24	0.25	0.26	0.26	0.27	0.28	0.29	0.29	0.30	0.31	0.32	0.25	0.08	
Insurance	£M	0.00	0.00	0.00	0.00	0.13	0.27	0.28	0.29	0.30	0.31	0.32	0.32	0.33	0.34	0.35	0.36	0.37	0.38	0.39	0.41	0.42	0.43	0.44	0.45	0.23	
Total Annual Costs	£M	0.00	0.00	0.00	0.00	2.35	3.80	3.98	4.09	4.21	4.33	4.45	4.58	4.70	4.84	4.97	5.11	5.26	5.41	5.56	5.71	5.88	6.04	6.21	6.31	4.13	
Depreciation	£M	0.00	0.00	0.24	0.73	1.24	3.73	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.34	4.84	4.34	1.84	0.00	0.00	0.00	0.00	
Profit Before Interest and Tax	£M	0.00	0.00	-0.24	-0.73	-1.61	4.09	7.70	6.04	6.31	6.57	6.61	7.19	7.76	8.91	9.50	10.12	10.75	11.65	12.83	14.04	17.27	19.87	20.66	14.59	3.09	
	£/MW	0	0	-2,395	-7,328	-16,087	40,896	76,995	60,405	63,141	65,722	66,121	71,879	77,628	89,134	95,042	101,167	107,519	116,498	128,258	140,395	172,668	198,694	206,574	145,905	30,875	
	£/MWh					-50.89	21.56	30.44	23.88	24.97	25.99	26.14	28.42	30.69	35.24	37.58	40.00	42.51	46.06	50.71	55.51	68.27	78.56	81.68	76.92	48.83	
Annual Average PBIT																											
	£M	8.46 2004 - 2027																									
	£/MW	84,571 2004 - 2027																									
	£/MWh	39.20 2004 - 2027																									
Interest on Finance	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tax	£M	0.00	0.00	-0.27	-0.76	-1.14	-3.77	-2.10	0.78	1.53	2.12	2.51	2.97	3.36	3.86	4.16	4.44	4.69	4.94	5.19	5.43	5.67	5.91	6.16	4.35	0.91	
Profit After Interest and Tax	£M	0.00	0.00	0.03	0.02	-0.47	7.86	9.80	5.27	4.78	4.45	4.10	4.22	4.40	5.05	5.34	5.68	6.06	6.71	7.64	8.61	11.60	13.96	14.50	10.24	2.18	
	£/MW	0	0	299	242	-4,715	78,589	97,993	52,651	47,793	44,519	40,989	42,162	44,044	50,490	53,420	56,804	60,572	67,067	76,398	86,126	115,984	139,569	144,964	102,405	21,816	
	£/MWh					-14.91	41.43	38.75	20.82	18.90	17.60	16.21	16.67	17.41	19.96	21.12	22.46	23.95	26.52	30.21	34.05	45.86	55.19	57.32	53.99	34.50	
Annual Average PAIT																											
	£M	5.92 2004 - 2027																									
	£/MW	59,174 2004 - 2027																									
	£/MWh	28.48 2004 - 2027																									
Cash Flow																											
Add Back Depreciation	£M	0.00	0.00	0.24	0.73	1.24	3.73	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.34	4.84	4.34	1.84	0.00	0.00	0.00	0.00	
Add Receipts																											
Loan	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Equity	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Subtract Payments																											
Capex	£M	0.00	3.59	7.40	7.59	37.41	27.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Loan Repayments	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total Cash Flow	£M	0.00	-3.59	-7.13	-6.84	-36.64	-16.04	15.37	10.84	10.35	10.03	9.67	9.79	9.98	10.62	10.92	11.26	11.63	12.04	12.48	12.95	13.44	13.96	14.50	10.24	2.18	
	£/MW	0.00	-35,921	-71,304	-68,351	-366,392	-160,445	153,744	108,402	103,544	100,271	96,740	97,913	99,795	106,241	109,171	112,555	116,323	120,424	124,821	129,488	134,408	139,569	144,964	102,405	21,816	
	£/MWh					-1,158.97	-84.59	60.79	42.86	40.94	39.65	38.25	38.71	39.46	42.01	43.17	44.50	45.99	47.62	49.35	51.20	53.15	55.19	57.32	53.99	34.50	
Annual Average Cash Flow																											
	£M	5.92 2004 - 2027																									
	£/MW	59,174 2004 - 2027																									
	£/MWh	-17.38 2004 - 2027																									
NPV Project Cashflow	£M	£20.91																									

ANNEX F

Profit/Loss Statements

Profit Statement - 100MW Onshore Wind Farm, Private Developer

	Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Income																										
Electricity Income	£M	0.00	0.00	0.00	0.00	0.68	3.73	6.29	6.73	6.87	6.99	6.88	7.31	7.73	8.72	9.15	9.59	10.06	10.54	11.04	11.56	12.10	12.66	13.25	10.39	3.62
ROC Income	£M	0.00	0.00	0.00	0.00	1.19	7.35	10.08	8.06	8.29	8.52	8.76	9.01	9.26	9.52	9.79	10.07	10.35	10.64	10.94	11.25	11.57	11.90	12.23	9.43	3.23
CCL Income	£M	0.00	0.00	0.00	0.00	0.11	0.54	0.89	0.92	0.94	0.97	1.00	1.02	1.05	1.08	1.11	1.14	1.18	1.21	1.24	1.28	1.31	1.35	1.39	1.07	0.37
Total Income	£M	0.00	0.00	0.00	0.00	1.98	11.62	17.26	15.71	16.10	16.47	16.64	17.34	18.04	19.33	20.05	20.81	21.58	22.39	23.23	24.09	24.99	25.91	26.87	20.90	7.22
Annual Costs																										
Routine O&M	£M	0.00	0.00	0.00	0.00	1.07	1.10	1.13	1.17	1.20	1.23	1.27	1.30	1.34	1.38	1.42	1.46	1.50	1.54	1.58	1.63	1.67	1.72	1.77	1.82	1.87
Transmission Use of System Charge	£M	0.00	0.00	0.00	0.00	0.95	1.95	2.01	2.06	2.12	2.18	2.24	2.31	2.37	2.44	2.51	2.58	2.65	2.73	2.80	2.88	2.96	3.05	3.13	3.22	1.66
Balancing Services Use of System Cost	£M	0.00	0.00	0.00	0.00	0.02	0.12	0.20	0.21	0.22	0.22	0.23	0.23	0.24	0.25	0.26	0.26	0.27	0.28	0.29	0.29	0.30	0.31	0.32	0.25	0.08
Rates	£M	0.00	0.00	0.00	0.00	0.13	0.27	0.28	0.29	0.30	0.31	0.32	0.32	0.33	0.34	0.35	0.36	0.37	0.38	0.39	0.41	0.42	0.43	0.44	0.45	0.23
Insurance	£M	0.00	0.00	0.00	0.00	0.17	0.34	0.35	0.36	0.37	0.39	0.40	0.41	0.42	0.43	0.44	0.45	0.47	0.48	0.49	0.51	0.52	0.54	0.55	0.57	0.29
Total Annual Costs	£M	0.00	0.00	0.00	0.00	2.35	3.80	3.98	4.09	4.21	4.33	4.45	4.58	4.70	4.84	4.97	5.11	5.26	5.41	5.56	5.71	5.88	6.04	6.21	6.31	4.13
Depreciation	£M	0.00	0.00	0.24	0.73	1.24	3.73	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.34	4.84	4.34	1.84	0.00	0.00	0.00
Profit Before Interest and Tax	£M	0.00	0.00	-0.24	-0.73	-1.61	4.09	7.70	6.04	6.31	6.57	6.61	7.19	7.76	8.91	9.50	10.12	10.75	11.65	12.83	14.04	17.27	19.87	20.66	14.59	3.09
	£/MW	0	0	-2.395	-7.328	-16.087	40.896	76.995	60.405	63.141	65.722	66.121	71.879	77.628	89.134	95.042	101.167	107.519	116.498	128.258	140.395	172.668	198.694	206.574	145.905	30.875
	£/MWh					-50.89	21.56	30.44	23.88	24.97	25.99	26.14	28.42	30.69	35.24	37.58	40.00	42.51	46.06	50.71	55.51	68.27	78.56	81.68	76.92	48.83
Annual Average PBIT																										
	£M		8.46	2004 - 2027																						
	£/MW		84,571	2004 - 2027																						
	£/MWh		39.20	2004 - 2027																						
Interest on Finance	£M	0.00	0.13	0.40	0.70	2.08	3.20	3.20	2.99	2.78	2.56	2.35	2.14	1.92	1.71	1.50	1.28	1.07	0.85	0.64	0.43	0.21	0.00	0.00	0.00	0.00
Tax	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70	1.35	1.81	2.33	2.78	3.35	3.71	4.05	4.37	4.69	4.99	5.30	5.60	5.91	6.16	4.35	0.91
Profit After Interest and Tax	£M	0.00	-0.13	-0.64	-1.43	-3.69	0.88	4.49	3.05	2.84	2.66	2.45	2.72	3.06	3.85	4.30	4.78	5.31	6.11	7.19	8.31	11.45	13.96	14.50	10.24	2.18
	£/MW	0	-1,284	-6,408	-14,316	-36,902	8,848	44,947	30,493	28,350	26,573	24,538	27,206	30,583	38,526	42,951	47,831	53,094	61,085	71,911	83,135	114,488	139,569	144,964	102,405	21,816
	£/MWh					-116.73	4.66	17.77	12.06	11.21	10.51	9.70	10.76	12.09	15.23	16.98	18.91	20.99	24.15	28.43	32.87	45.27	55.19	57.32	53.99	34.50
Annual Average PAIT																										
	£M		4.52	2004 - 2027																						
	£/MW		45,183	2004 - 2027																						
	£/MWh		17.90	2004 - 2027																						
Cash Flow																										
Add Back Depreciation	£M	0.00	0.00	0.24	0.73	1.24	3.73	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.34	4.84	4.34	1.84	0.00	0.00	0.00
Add Receipts																										
Loan	£M	0.00	2.10	4.47	4.87	22.66	18.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subtract Payments																										
Capex	£M	0.00	3.59	7.40	7.59	37.41	27.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loan Repayments	£M	0.00	0.00	0.00	0.00	0.00	3.20	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.29	0.00	0.00	0.00
Total Cash Flow	£M	0.00	-1.62	-3.33	-3.42	-17.20	-7.82	6.78	5.34	5.12	4.95	4.74	5.01	5.35	6.14	6.58	7.07	7.60	8.16	8.75	9.36	10.00	13.96	14.50	10.24	2.18
	£/MW	0	-16,165	-33,299	-34,165	-172,027	-78,188	67,828	53,375	51,232	49,454	47,419	50,088	53,465	61,407	65,832	70,712	75,975	81,572	87,464	93,627	100,043	139,569	144,964	102,405	21,816
	£/MWh					-544.16	-41.22	26.82	21.10	20.26	19.55	18.75	19.80	21.14	24.28	26.03	27.96	30.04	32.25	34.58	37.02	39.56	55.19	57.32	53.99	34.50
Annual Average Cash Flow																										
	£M		4.52	2004 - 2027																						
	£/MW		45,183	2004 - 2027																						
	£/MWh		0.70	2004 - 2027																						
NPV Project Cashflow	£M		-£0.38																							

ANNEX F Profit/Loss Statements

Profit Statement - 100MW Onshore Wind Farm, Joint Venture Developer

	Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Income																										
Electricity Income	EM	0.00	0.00	0.00	0.00	0.68	3.73	6.29	6.73	6.87	6.99	6.88	7.31	7.73	8.72	9.15	9.59	10.06	10.54	11.04	11.56	12.10	12.66	13.25	10.39	3.62
ROC Income	EM	0.00	0.00	0.00	0.00	1.19	7.35	10.08	8.06	8.29	8.52	8.76	9.01	9.26	9.52	9.79	10.07	10.35	10.64	10.94	11.25	11.57	11.90	12.23	9.43	3.23
CCL Income	EM	0.00	0.00	0.00	0.00	0.11	0.54	0.89	0.92	0.94	0.97	1.00	1.02	1.05	1.08	1.11	1.14	1.18	1.21	1.24	1.28	1.31	1.35	1.39	1.07	0.37
Total Income	EM	0.00	0.00	0.00	0.00	1.98	11.62	17.26	15.71	16.10	16.47	16.64	17.34	18.04	19.33	20.05	20.81	21.58	22.39	23.23	24.09	24.99	25.91	26.87	20.90	7.22
Annual Costs																										
Routine O&M	EM	0.00	0.00	0.00	0.00	1.07	1.10	1.13	1.17	1.20	1.23	1.27	1.30	1.34	1.38	1.42	1.46	1.50	1.54	1.58	1.63	1.67	1.72	1.77	1.82	1.87
Transmission Use of System Charge	EM	0.00	0.00	0.00	0.00	0.95	1.95	2.01	2.06	2.12	2.18	2.24	2.31	2.37	2.44	2.51	2.58	2.65	2.73	2.80	2.88	2.96	3.05	3.13	3.22	1.66
Balancing Services Use of System Cost	EM	0.00	0.00	0.00	0.00	0.02	0.12	0.20	0.21	0.22	0.22	0.23	0.23	0.24	0.25	0.26	0.26	0.27	0.28	0.29	0.29	0.30	0.31	0.32	0.25	0.08
Rates	EM	0.00	0.00	0.00	0.00	0.13	0.27	0.28	0.29	0.30	0.31	0.32	0.32	0.33	0.34	0.35	0.36	0.37	0.38	0.39	0.41	0.42	0.43	0.44	0.45	0.23
Insurance	EM	0.00	0.00	0.00	0.00	0.17	0.34	0.35	0.36	0.37	0.39	0.40	0.41	0.42	0.43	0.44	0.45	0.47	0.48	0.49	0.51	0.52	0.54	0.55	0.57	0.29
Total Annual Costs	EM	0.00	0.00	0.00	0.00	2.35	3.80	3.98	4.09	4.21	4.33	4.45	4.58	4.70	4.84	4.97	5.11	5.26	5.41	5.56	5.71	5.88	6.04	6.21	6.31	4.13
Depreciation	EM	0.00	0.00	0.24	0.73	1.24	3.73	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.34	4.84	4.34	1.84	0.00	0.00	0.00	0.00
Profit Before Interest and Tax	EM	0.00	0.00	-0.24	-0.73	-1.61	4.09	7.70	6.04	6.31	6.57	6.61	7.19	7.76	8.91	9.50	10.12	10.75	11.65	12.83	14.04	17.27	19.87	20.66	14.59	3.09
	E/MW	0	0	-2,395	-7,328	-16,087	40,896	76,995	60,405	63,141	65,722	66,121	71,879	77,628	89,134	95,042	101,167	107,519	116,498	128,258	140,395	172,668	198,694	206,574	145,905	30,875
	E/MWh	0	0	-2,395	-7,328	-50.89	21.56	30.44	23.88	24.97	25.99	26.14	28.42	30.69	35.24	37.58	40.00	42.51	46.06	50.71	55.51	68.27	78.56	81.68	76.92	48.83
Annual Average PBIT																										
	EM	8.46 2004 - 2027																								
	E/MW	84,571 2004 - 2027																								
	E/MWh	39.20 2004 - 2027																								
Interest on Finance	EM	0.00	0.13	0.40	0.70	2.08	3.20	3.20	2.99	2.78	2.56	2.35	2.14	1.92	1.71	1.50	1.28	1.07	0.85	0.64	0.43	0.21	0.00	0.00	0.00	0.00
Tax	EM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70	1.35	1.81	2.33	2.78	3.35	3.71	4.05	4.37	4.69	4.99	5.30	5.60	5.91	6.16	4.35	0.91
Profit After Interest and Tax	EM	0.00	-0.13	-0.64	-1.43	-3.69	0.88	4.49	3.05	2.84	2.66	2.45	2.72	3.06	3.85	4.30	4.78	5.31	6.11	7.19	8.31	11.45	13.96	14.50	10.24	2.18
	E/MW	0	-1,284	-6,408	-14,316	-36,902	8,848	44,947	30,493	28,350	26,573	24,538	27,206	30,583	38,526	42,951	47,831	53,094	61,085	71,911	83,135	114,488	139,569	144,964	102,405	21,816
	E/MWh	0	-1,284	-6,408	-14,316	-116.73	4.66	17.77	12.06	11.21	10.51	9.70	10.76	12.09	15.23	16.98	18.91	20.99	24.15	28.43	32.87	45.27	55.19	57.32	53.99	34.50
Annual Average PAIT																										
	EM	4.52 2004 - 2027																								
	E/MW	45,183 2004 - 2027																								
	E/MWh	17.90 2004 - 2027																								
Cash Flow																										
Add Back Depreciation	EM	0.00	0.00	0.24	0.73	1.24	3.73	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.34	4.84	4.34	1.84	0.00	0.00	0.00	0.00
Add Receipts																										
Loan	EM	0.00	2.10	4.47	4.87	22.66	18.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subtract Payments																										
Capex	EM	0.00	3.59	7.40	7.59	37.41	27.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Loan Repayments	EM	0.00	0.00	0.00	0.00	0.00	3.20	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.29	0.00	0.00	0.00
Total Cash Flow	EM	0.00	-1.62	-3.33	-3.42	-17.20	-7.82	6.78	5.34	5.12	4.95	4.74	5.01	5.35	6.14	6.58	7.07	7.60	8.16	8.75	9.36	10.00	13.96	14.50	10.24	2.18
	E/MW	0.00	-16,165	-33,299	-34,165	-172,027	-78,188	67,828	53,375	51,232	49,454	47,419	50,088	53,465	61,407	65,832	70,712	75,975	81,572	87,464	93,627	100,043	139,569	144,964	102,405	21,816
	E/MWh	0.00	-16,165	-33,299	-34,165	-544.16	-41.22	26.82	21.10	20.26	19.55	18.75	19.80	21.14	24.28	26.03	27.96	30.04	32.25	34.58	37.02	39.56	55.19	57.32	53.99	34.50
Annual Average Cash Flow																										
	EM	4.52 2004 - 2027																								
	E/MW	45,183 2004 - 2027																								
	E/MWh	0.70 2004 - 2027																								
NPV Project Cashflow	EM	€30.98																								

ANNEX F Profit/Loss Statements

Profit Statement - 40MW Onshore Wind Farm, Utility Developer

	Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Income																										
Electricity Income	£M	0.00	0.00	0.00	0.00	0.54	2.39	2.51	2.69	2.75	2.79	2.75	2.92	3.09	3.49	3.66	3.84	4.02	4.22	4.42	4.62	4.84	5.07	5.30	4.16	1.45
ROC Income	£M	0.00	0.00	0.00	0.00	0.95	3.92	4.03	3.22	3.31	3.41	3.50	3.60	3.70	3.81	3.92	4.03	4.14	4.26	4.38	4.50	4.63	4.76	4.89	3.77	1.29
CCL Income	£M	0.00	0.00	0.00	0.00	0.08	0.35	0.36	0.37	0.38	0.39	0.40	0.41	0.42	0.43	0.45	0.46	0.47	0.48	0.50	0.51	0.53	0.54	0.56	0.43	0.15
Total Income	£M	0.00	0.00	0.00	0.00	1.58	6.65	6.90	6.28	6.44	6.59	6.65	6.94	7.22	7.73	8.02	8.32	8.63	8.96	9.29	9.64	9.99	10.36	10.75	8.36	2.89
Annual Costs																										
Routine O&M	£M	0.00	0.00	0.00	0.00	0.43	0.44	0.45	0.47	0.48	0.49	0.51	0.52	0.54	0.55	0.57	0.58	0.60	0.62	0.63	0.65	0.67	0.69	0.71	0.73	0.75
Transmission Use of System Charge	£M	0.00	0.00	0.00	0.00	0.76	0.78	0.80	0.83	0.85	0.87	0.90	0.92	0.95	0.98	1.00	1.03	1.06	1.09	1.12	1.15	1.19	1.22	1.25	1.29	0.66
Balancing Services Use of System Cost	£M	0.00	0.00	0.00	0.00	0.02	0.08	0.08	0.08	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.11	0.11	0.11	0.12	0.12	0.12	0.13	0.13	0.10	0.03
Rates	£M	0.00	0.00	0.00	0.00	0.11	0.11	0.11	0.12	0.12	0.12	0.13	0.13	0.13	0.14	0.14	0.14	0.15	0.15	0.16	0.16	0.17	0.17	0.18	0.18	0.09
Insurance	£M	0.00	0.00	0.00	0.00	0.13	0.14	0.14	0.15	0.15	0.15	0.16	0.16	0.17	0.17	0.18	0.18	0.19	0.19	0.20	0.20	0.21	0.22	0.22	0.23	0.12
Total Annual Costs	£M	0.00	0.00	0.00	0.00	1.45	1.55	1.59	1.64	1.68	1.73	1.78	1.83	1.88	1.93	1.99	2.05	2.10	2.16	2.22	2.29	2.35	2.42	2.48	2.52	1.65
Depreciation	£M	0.00	0.00	0.10	0.29	0.50	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.11	1.92	1.71	0.00	0.00	0.00	0.00	0.00
Profit Before Interest and Tax	£M	0.00	0.00	-0.10	-0.29	-0.36	2.89	3.10	2.44	2.55	2.65	2.67	2.90	3.13	3.59	3.82	4.07	4.32	4.68	5.15	5.64	6.14	6.64	7.15	7.68	1.23
	£/MW	0	0	-2,395	-7,328	-9,063	72,349	77,500	60,910	63,646	66,227	66,626	72,384	78,133	89,639	95,547	101,673	108,024	117,003	128,763	140,901	191,092	198,694	206,574	145,905	30,875
	£/MWh						28.61	30.64	24.08	25.17	26.19	26.34	28.62	30.89	35.44	37.78	40.20	42.71	46.26	50.91	55.71	75.56	78.56	81.68	76.92	48.83
Annual Average PBIT																										
	£M	3.49 2004 - 2027																								
	£/MW	87,237 2004 - 2027																								
	£/MWh	41.75 2004 - 2027																								
Interest on Finance	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tax	£M	0.00	0.00	-0.11	-0.30	-0.45	-2.23	0.15	0.44	0.71	0.92	1.06	1.23	1.37	1.57	1.68	1.79	1.89	1.98	2.08	2.17	2.27	2.37	2.47	1.74	0.36
Profit After Interest and Tax	£M	0.00	0.00	0.01	0.01	0.09	5.12	2.95	2.00	1.84	1.73	1.61	1.67	1.75	2.02	2.14	2.28	2.43	2.70	3.07	3.46	5.37	5.58	5.80	4.09	0.87
	£/MW	0	0	299	242	2,309	128,093	73,873	50,002	45,932	43,250	40,164	41,669	43,800	50,434	53,504	56,994	60,840	67,395	76,770	86,532	134,333	139,513	144,921	102,373	21,792
	£/MWh					3.65	50.65	29.21	19.77	18.16	17.10	15.88	16.48	17.32	19.94	21.16	22.54	24.06	26.65	30.35	34.21	53.12	55.16	57.30	53.97	34.47
Annual Average PAIT																										
	£M	2.44 2004 - 2027																								
	£/MW	61,043 2004 - 2027																								
	£/MWh	29.58 2004 - 2027																								
Cash Flow																										
Add Back Depreciation	£M	0.00	0.00	0.10	0.29	0.50	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.11	1.92	1.71	0.00	0.00	0.00	0.00	0.00
Add Receipts																										
Loan	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subtract Payments																										
Capex	£M	0.00	1.44	2.96	3.04	25.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loan Repayments	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cash Flow	£M	0.00	-1.44	-2.85	-2.73	-25.13	7.33	5.16	4.21	4.05	3.94	3.82	3.88	3.96	4.23	4.35	4.49	4.64	4.81	4.99	5.18	5.37	5.58	5.80	4.09	0.87
	£/MW	0	-35,921	-71,304	-68,351	-628,150	183,339	129,119	105,248	101,178	98,496	95,410	96,915	99,046	105,680	108,750	112,240	116,086	120,246	124,688	129,388	134,333	139,513	144,921	102,373	21,792
	£/MWh					-993.48	72.49	51.05	41.61	40.01	38.95	37.72	38.32	39.16	41.79	43.00	44.38	45.90	47.55	49.30	51.16	53.12	55.16	57.30	53.97	34.47
Annual Average Cash Flow																										
	£M	2.44 2004 - 2027																								
	£/MW	61,043 2004 - 2027																								
	£/MWh	-2.72 2004 - 2027																								
NPV Project Cashflow	£M	£9.16																								

ANNEX F Profit/Loss Statements

Profit Statement - 40MW Onshore Wind Farm, Private Developer

	Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	
Income																											
Electricity Income	£M	0.00	0.00	0.00	0.00	0.54	2.39	2.51	2.69	2.75	2.79	2.75	2.92	3.09	3.49	3.66	3.84	4.02	4.22	4.42	4.62	4.84	5.07	5.30	4.16	1.45	
ROC Income	£M	0.00	0.00	0.00	0.00	0.95	3.92	4.03	3.22	3.31	3.41	3.50	3.60	3.70	3.81	3.92	4.03	4.14	4.26	4.38	4.50	4.63	4.76	4.89	3.77	1.29	
CCL Income	£M	0.00	0.00	0.00	0.00	0.08	0.35	0.36	0.37	0.38	0.39	0.40	0.41	0.42	0.43	0.45	0.46	0.47	0.48	0.50	0.51	0.53	0.54	0.56	0.43	0.15	
Total Income	£M	0.00	0.00	0.00	0.00	1.58	6.65	6.90	6.28	6.44	6.59	6.65	6.94	7.22	7.73	8.02	8.32	8.63	8.96	9.29	9.64	9.99	10.36	10.75	8.36	2.89	
Annual Costs																											
Routine O&M	£M	0.00	0.00	0.00	0.00	0.43	0.44	0.45	0.47	0.48	0.49	0.51	0.52	0.54	0.55	0.57	0.58	0.60	0.62	0.63	0.65	0.67	0.69	0.71	0.73	0.75	
Transmission Use of System Charge	£M	0.00	0.00	0.00	0.00	0.76	0.78	0.80	0.83	0.85	0.87	0.90	0.92	0.95	0.98	1.00	1.03	1.06	1.09	1.12	1.15	1.19	1.22	1.25	1.29	0.66	
Balancing Services Use of System Cost	£M	0.00	0.00	0.00	0.00	0.02	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.11	0.11	0.11	0.12	0.12	0.13	0.10	0.10	0.03	
Rates	£M	0.00	0.00	0.00	0.00	0.11	0.11	0.11	0.12	0.12	0.12	0.13	0.13	0.13	0.14	0.14	0.14	0.15	0.15	0.16	0.16	0.17	0.17	0.18	0.18	0.09	
Insurance	£M	0.00	0.00	0.00	0.00	0.13	0.14	0.14	0.15	0.15	0.15	0.16	0.16	0.17	0.17	0.18	0.18	0.19	0.19	0.20	0.20	0.21	0.22	0.22	0.23	0.12	
Total Annual Costs	£M	0.00	0.00	0.00	0.00	1.45	1.55	1.59	1.64	1.68	1.73	1.78	1.83	1.88	1.93	1.99	2.05	2.10	2.16	2.22	2.29	2.35	2.42	2.48	2.52	1.65	
Depreciation	£M	0.00	0.00	0.10	0.29	0.50	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.11	1.92	1.71	0.00	0.00	0.00	0.00	0.00	
Profit Before Interest and Tax	£M	0.00	0.00	-0.10	-0.29	-0.36	2.89	3.10	2.44	2.55	2.65	2.67	2.90	3.13	3.59	3.82	4.07	4.32	4.68	5.15	5.64	7.64	7.95	8.26	5.84	1.23	
	£/MW	0	0	-2,395	-7,328	-9,063	72,349	77,500	60,910	63,646	66,227	66,626	72,384	78,133	89,639	95,547	101,673	108,024	117,003	128,763	140,901	191,092	198,694	206,574	145,905	30,875	
	£/MWh	0	0	-2,395	-7,328	-14,333	28,61	30,64	24,08	25,17	26,19	26,34	28,62	30,89	35,44	37,78	40,20	42,71	46,26	50,91	55,71	75,56	78,56	81,68	76,92	48,83	
Annual Average PBIT																											
	£M	3.49 2004-2027																									
	£/MW	87,237 2004-2027																									
	£/MWh	41,75 2004-2027																									
Interest on Finance	£M	0.00	0.05	0.16	0.28	1.22	1.29	1.20	1.12	1.03	0.94	0.86	0.77	0.69	0.60	0.51	0.43	0.34	0.26	0.17	0.09	0.00	0.00	0.00	0.00	0.00	
Tax	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.38	0.64	0.80	1.00	1.17	1.39	1.53	1.66	1.78	1.91	2.03	2.15	2.27	2.37	2.47	1.74	0.33	
Profit After Interest and Tax	£M	0.00	-0.05	-0.26	-0.57	-1.58	1.61	1.90	1.26	1.14	1.07	1.01	1.13	1.27	1.60	1.78	1.98	2.19	2.52	2.95	3.40	5.37	5.58	5.80	4.09	0.90	
	£/MW	0	-1,284	-6,408	-14,316	-39,487	40,163	47,461	31,377	28,421	26,728	25,144	28,151	31,784	39,920	44,492	49,484	54,832	62,889	73,766	85,030	134,333	139,513	144,921	102,373	22,594	
	£/MWh	0	-1,284	-6,408	-14,316	-62,45	15,88	18,77	12,41	11,24	10,57	9,94	11,13	12,57	15,78	17,59	19,57	21,68	24,87	29,17	33,62	53,12	55,16	57,30	53,97	35,73	
Annual Average PAIT																											
	£M	1.92 2004-2027																									
	£/MW	47,995 2004-2027																									
	£/MWh	21,79 2004-2027																									
Cash Flow																											
Add Back Depreciation	£M	0.00	0.00	0.10	0.29	0.50	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.11	1.92	1.71	0.00	0.00	0.00	0.00	0.00	
Add Receipts																											
Loan	£M	0.00	0.84	1.79	1.95	15.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Subtract Payments																											
Capex	£M	0.00	1.44	2.96	3.04	25.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Loan Repayments	£M	0.00	0.00	0.00	0.00	0.13	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	
Total Cash Flow	£M	0.00	-0.65	-1.33	-1.37	-11.57	2.50	2.79	2.14	2.03	1.96	1.90	2.02	2.16	2.49	2.67	2.87	3.08	3.31	3.55	3.80	5.37	5.58	5.80	4.09	0.90	
	£/MW	0	-16,165	-33,299	-34,165	-289,282	62,398	69,696	53,612	50,656	48,964	47,379	50,386	54,020	62,155	66,728	71,719	77,068	82,730	88,673	94,876	134,333	139,513	144,921	102,373	22,594	
	£/MWh	0	-16,165	-33,299	-34,165	-457,53	24,67	27,56	21,20	20,03	19,36	18,73	19,92	21,36	24,58	26,38	28,36	30,47	32,71	35,06	37,51	53,12	55,16	57,30	53,97	35,73	
Nominal Annual Average Cash Flow																											
	£M	1.92 2004-2027																									
	£/MW	47,995 2004-2027																									
	£/MWh	8.84 2004-2027																									
NPV Project Cashflow	£M	£0.11																									

ANNEX F Profit/Loss Statements

Profit Statement - 40MW Onshore Wind Farm, Joint Venture Developer

	Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	
Income																											
Electricity Income	£M	0.00	0.00	0.00	0.00	0.54	2.39	2.51	2.69	2.75	2.79	2.75	2.92	3.09	3.49	3.66	3.84	4.02	4.22	4.42	4.62	4.84	5.07	5.30	4.16	1.45	
ROC Income	£M	0.00	0.00	0.00	0.00	0.95	3.92	4.03	3.22	3.31	3.41	3.50	3.60	3.70	3.81	3.92	4.03	4.14	4.26	4.38	4.50	4.63	4.76	4.89	3.77	1.29	
CCL Income	£M	0.00	0.00	0.00	0.00	0.08	0.35	0.36	0.37	0.38	0.39	0.40	0.41	0.42	0.43	0.45	0.46	0.47	0.48	0.50	0.51	0.53	0.54	0.56	0.43	0.15	
Total Income	£M	0.00	0.00	0.00	0.00	1.58	6.65	6.90	6.28	6.44	6.59	6.65	6.94	7.22	7.73	8.02	8.32	8.63	8.96	9.29	9.64	9.99	10.36	10.75	8.36	2.89	
Annual Costs																											
Routine O&M	£M	0.00	0.00	0.00	0.00	0.43	0.44	0.45	0.47	0.48	0.49	0.51	0.52	0.54	0.55	0.57	0.58	0.60	0.62	0.63	0.65	0.67	0.69	0.71	0.73	0.75	
Transmission Use of System Charge	£M	0.00	0.00	0.00	0.00	0.76	0.78	0.80	0.83	0.85	0.87	0.90	0.92	0.95	0.98	1.00	1.03	1.06	1.09	1.12	1.15	1.19	1.22	1.25	1.29	0.66	
Balancing Services Use of System Cost	£M	0.00	0.00	0.00	0.00	0.02	0.08	0.08	0.08	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.11	0.11	0.11	0.11	0.12	0.12	0.13	0.10	0.10	0.03	
Rates	£M	0.00	0.00	0.00	0.00	0.11	0.11	0.11	0.12	0.12	0.12	0.13	0.13	0.13	0.14	0.14	0.14	0.15	0.15	0.16	0.16	0.17	0.17	0.18	0.18	0.09	
Insurance	£M	0.00	0.00	0.00	0.00	0.13	0.14	0.14	0.15	0.15	0.15	0.16	0.16	0.17	0.17	0.18	0.18	0.19	0.19	0.20	0.20	0.21	0.22	0.22	0.23	0.12	
Total Annual Costs	£M	0.00	0.00	0.00	0.00	1.45	1.55	1.59	1.64	1.68	1.73	1.78	1.83	1.88	1.93	1.99	2.05	2.10	2.16	2.22	2.29	2.35	2.42	2.48	2.52	1.65	
Depreciation	£M	0.00	0.00	0.10	0.29	0.50	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.11	1.92	1.71	0.00	0.00	0.00	0.00	0.00	
Profit Before Interest and Tax	£M	0.00	0.00	-0.10	-0.29	-0.36	2.89	3.10	2.44	2.55	2.65	2.67	2.90	3.13	3.59	3.82	4.07	4.32	4.68	5.15	5.64	7.64	7.95	8.26	5.84	1.23	
	£/MW	0	0	-2,395	-7,328	-9,063	72,349	77,500	60,910	63,646	66,227	66,626	72,384	78,133	89,639	95,547	101,673	108,024	117,003	128,763	140,901	191,092	198,694	206,574	145,905	30,875	
	£/MWh				-14.33	28.61	30.64	24.08	25.17	26.19	26.34	28.62	30.89	35.44	37.78	40.20	42.71	46.26	50.91	55.71	75.56	78.56	81.68	76.92	48.83		
Annual Average PBIT																											
	£M	3.49	2004 - 2027																								
	£/MW	87.237	2004 - 2027																								
	£/MWh	41.75	2004 - 2027																								
Interest on Finance	£M	0.00	0.05	0.16	0.28	1.22	1.29	1.20	1.12	1.03	0.94	0.86	0.77	0.69	0.60	0.51	0.43	0.34	0.26	0.17	0.09	0.00	0.00	0.00	0.00	0.00	
Tax	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.38	0.64	0.80	1.00	1.17	1.39	1.53	1.66	1.78	1.91	2.03	2.15	2.27	2.37	2.47	1.74	0.33	
Profit After Interest and Tax	£M	0.00	-0.05	-0.26	-0.57	-1.58	1.61	1.90	1.26	1.14	1.07	1.01	1.13	1.27	1.60	1.78	1.98	2.19	2.52	2.95	3.40	5.37	5.58	5.80	4.09	0.90	
	£/MW	0	-1,284	-6,408	-14,316	-39,487	40,163	47,461	31,377	28,421	26,728	25,144	28,151	31,784	39,920	44,492	49,484	54,832	62,889	73,766	85,030	134,333	139,513	144,921	102,373	22,594	
	£/MWh				-62.45	15.88	18.77	12.41	11.24	10.57	9.94	11.13	12.57	15.78	17.59	19.57	21.68	24.87	29.17	33.62	53.12	55.16	57.30	53.97	35.73		
Annual Average PAIT																											
	£M	1.92	2004 - 2027																								
	£/MW	47.995	2004 - 2027																								
	£/MWh	21.79	2004 - 2027																								
Cash Flow																											
Add Back Depreciation	£M	0.00	0.00	0.10	0.29	0.50	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.11	1.92	1.71	0.00	0.00	0.00	0.00	0.00	
Add Receipts																											
Loan	£M	0.00	0.84	1.79	1.95	15.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Subtract Payments																											
Capex	£M	0.00	1.44	2.96	3.04	25.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Loan Repayments	£M	0.00	0.00	0.00	0.00	0.13	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	0.00	0.00	0.00	0.00	0.00	
Total Cash Flow	£M	0.00	-0.65	-1.33	-1.37	-11.57	2.50	2.79	2.14	2.03	1.96	1.90	2.02	2.16	2.49	2.67	2.87	3.08	3.31	3.55	3.80	5.37	5.58	5.80	4.09	0.90	
	£/MW	0	-16,165	-33,299	-34,165	-289,282	62,398	69,696	53,612	50,656	48,964	47,379	50,386	54,020	62,155	66,728	71,719	77,068	82,730	88,673	94,876	134,333	139,513	144,921	102,373	22,594	
	£/MWh					-457.53	24.67	27.56	21.20	20.03	19.36	18.73	19.92	21.36	24.58	26.38	28.36	30.47	32.71	35.06	37.51	53.12	55.16	57.30	53.97	35.73	
Annual Average Cash Flow																											
	£M	1.92	2004 - 2027																								
	£/MW	47.995	2004 - 2027																								
	£/MWh	8.84	2004 - 2027																								
NPV Project Cashflow	£M	£13.48																									

ANNEX F Profit/Loss Statements

Profit Statement - 200MW Offshore Wind Farm, Utility Developer

	Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	
Income																											
Electricity Income	£M	0.00	0.00	0.00	0.00	1.85	10.15	17.12	18.34	18.71	19.02	18.74	19.90	21.04	23.74	24.91	26.12	27.38	28.70	30.06	31.48	32.95	34.48	36.08	28.30	9.86	
ROC Income	£M	0.00	0.00	0.00	0.00	3.08	19.00	26.05	20.83	21.42	22.02	22.65	23.28	23.94	24.62	25.31	26.02	26.76	27.51	28.29	29.09	29.91	30.75	31.62	24.38	8.36	
CCL Income	£M	0.00	0.00	0.00	0.00	0.27	1.38	2.27	2.34	2.40	2.47	2.54	2.61	2.69	2.76	2.84	2.92	3.00	3.09	3.17	3.26	3.36	3.45	3.55	2.74	0.94	
Total Income	£M	0.00	0.00	0.00	0.00	5.20	30.53	45.44	41.51	42.53	43.52	43.92	45.79	47.67	51.12	53.06	55.07	57.15	59.30	61.52	63.83	66.21	68.68	71.24	55.41	19.16	
Annual Costs																											
Routine O&M	£M	0.00	0.00	0.00	0.00	4.56	4.68	4.82	4.95	5.09	5.24	5.38	5.54	5.69	5.85	6.02	6.19	6.36	6.54	6.73	6.92	7.11	7.31	7.52	7.73	7.95	
Transmission Use of System Charge	£M	0.00	0.00	0.00	0.00	1.90	3.90	4.01	4.13	4.24	4.36	4.49	4.61	4.74	4.88	5.01	5.16	5.30	5.45	5.60	5.76	5.93	6.09	6.26	6.44	3.31	
Balancing Services Use of System Cost	£M	0.00	0.00	0.00	0.00	0.06	0.32	0.52	0.54	0.55	0.57	0.58	0.60	0.62	0.63	0.65	0.67	0.69	0.71	0.73	0.75	0.77	0.79	0.81	0.83	0.63	0.21
Rates	£M	0.00	0.00	0.00	0.00	0.27	0.55	0.56	0.58	0.60	0.61	0.63	0.65	0.67	0.69	0.70	0.72	0.75	0.77	0.79	0.81	0.83	0.86	0.88	0.91	0.58	
Insurance	£M	0.00	0.00	0.00	0.00	0.34	0.69	0.71	0.73	0.75	0.77	0.79	0.81	0.84	0.86	0.88	0.91	0.94	0.96	0.99	1.02	1.05	1.08	1.11	1.14	0.47	
Crown Estates Lease	£M	0.00	0.00	0.00	0.00	0.10	0.61	0.91	0.83	0.85	0.87	0.88	0.92	0.95	1.02	1.06	1.10	1.14	1.19	1.23	1.28	1.32	1.37	1.42	1.11	0.38	
Total Annual Costs	£M	0.00	0.00	0.00	0.00	7.22	10.75	11.53	11.76	12.08	12.42	12.75	13.13	13.51	13.93	14.33	14.75	15.17	15.61	16.06	16.53	17.01	17.50	18.00	17.95	12.91	
Depreciation	£M	0.00	0.00	0.52	1.59	2.69	10.14	14.89	14.89	14.89	14.89	14.89	14.89	14.89	14.89	14.89	14.89	14.89	14.37	13.30	12.20	4.75	0.00	0.00	0.00	0.00	
Profit Before Interest and Tax	£M	0.00	0.00	-0.52	-1.59	-4.72	9.64	19.02	14.86	15.56	16.21	16.28	17.78	19.27	22.30	23.84	25.43	27.08	29.31	32.16	35.10	44.45	51.18	53.24	37.47	6.25	
	£/MW	0	0	-2.602	-7.964	-23.575	48.207	95.093	74.301	77.776	81.039	81.386	88.878	96.353	111.502	119.177	127.137	135.392	146.555	160.793	175.496	222.264	255.925	266.179	187.341	31.254	
	£/MWh					-57.70	19.66	29.09	22.73	23.79	24.79	24.90	27.19	29.48	34.11	36.46	38.89	41.42	44.83	49.19	53.69	67.99	78.29	81.43	76.41	38.24	
Annual Average PBIT	£M	21.23 2004 - 2027																									
	£/MW	106.163 2004 - 2027																									
	£/MWh	37.38 2004 - 2027																									
Interest on Finance	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Tax	£M	0.00	0.00	-0.59	-1.65	-2.47	-10.84	-6.68	1.60	3.64	5.21	6.26	7.48	8.51	9.85	10.64	11.36	12.04	12.69	13.33	13.96	14.59	15.22	15.87	11.17	1.82	
Profit After Interest and Tax	£M	0.00	0.00	0.07	0.05	-2.24	20.48	25.70	13.26	11.91	11.00	10.02	10.29	10.76	12.45	13.19	14.06	15.04	16.62	18.83	21.14	29.86	35.96	37.36	26.30	4.43	
	£/MW	0	0	325	263	-11.217	102.389	128.486	66.292	59.570	54.988	50.081	51.463	53.799	62.231	65.974	70.324	75.186	83.094	94.153	105.709	149.324	179.800	186.814	131.506	22.153	
	£/MWh					-27.45	41.76	39.31	20.28	18.22	16.82	15.32	15.74	16.46	19.04	20.18	21.51	23.00	25.42	28.80	32.34	45.68	55.00	57.15	53.64	27.11	
Annual Average PAIT	£M	14.86 2004 - 2027																									
	£/MW	74.280 2004 - 2027																									
	£/MWh	26.92 2004 - 2027																									
Cash Flow																											
Add Back Depreciation	£M	0.00	0.00	0.52	1.59	2.69	10.14	14.89	14.89	14.89	14.89	14.89	14.89	14.89	14.89	14.89	14.89	14.89	14.37	13.30	12.20	4.75	0.00	0.00	0.00	0.00	
Add Receipts																											
Loan	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Subtract Payments																											
Capex	£M	0.00	7.81	16.08	16.50	111.68	71.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Loan Repayments	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total Cash Flow	£M	0.00	-7.81	-15.50	-14.86	-111.23	-40.69	40.59	28.15	26.81	25.89	24.91	25.18	25.65	27.34	28.09	28.96	29.93	30.99	32.13	33.34	34.62	35.96	37.36	26.30	4.43	
	£/MW	0.00	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	22,153.00	
	£/MWh					-1,361.06	-82.99	62.08	43.06	41.00	39.60	38.10	38.52	39.24	41.82	42.96	44.29	45.78	47.40	49.14	51.00	52.95	55.00	57.15	53.64	27.11	
Annual Average Cash Flow	£M	14.86 2004 - 2027																									
	£/MW	74.280 2004 - 2027																									
	£/MWh	-27.34 2004 - 2027																									
NPV Project Cashflow	£M	£48.44																									

ANNEX F Profit/Loss Statements

Profit Statement - 200MW Offshore Wind Farm, Private Developer

	Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Income																										
Electricity Income	£M	0.00	0.00	0.00	0.00	1.85	10.15	17.12	18.34	18.71	19.02	18.74	19.90	21.04	23.74	24.91	26.12	27.38	28.70	30.06	31.48	32.95	34.48	36.08	28.30	9.86
ROC Income	£M	0.00	0.00	0.00	0.00	3.08	19.00	26.05	20.83	21.42	22.02	22.65	23.28	23.94	24.62	25.31	26.02	26.76	27.51	28.29	29.09	29.91	30.75	31.62	24.38	8.36
CCL Income	£M	0.00	0.00	0.00	0.00	0.27	1.38	2.27	2.34	2.40	2.47	2.54	2.61	2.69	2.76	2.84	2.92	3.00	3.09	3.17	3.26	3.36	3.45	3.55	2.74	0.94
Total Income	£M	0.00	0.00	0.00	0.00	5.20	30.53	45.44	41.51	42.53	43.52	43.92	45.79	47.67	51.12	53.06	55.07	57.15	59.30	61.52	63.83	66.21	68.68	71.24	55.41	19.16
Annual Costs																										
Routine O&M	£M	0.00	0.00	0.00	0.00	4.56	4.68	4.82	4.95	5.09	5.24	5.38	5.54	5.69	5.85	6.02	6.19	6.36	6.54	6.73	6.92	7.11	7.31	7.52	7.73	7.95
Transmission Use of System Charge	£M	0.00	0.00	0.00	0.00	1.90	3.90	4.01	4.13	4.24	4.36	4.49	4.61	4.74	4.88	5.01	5.16	5.30	5.45	5.60	5.76	5.93	6.09	6.26	6.44	3.31
Balancing Services Use of System Cost	£M	0.00	0.00	0.00	0.00	0.06	0.32	0.52	0.54	0.55	0.57	0.58	0.60	0.62	0.63	0.65	0.67	0.69	0.71	0.73	0.75	0.77	0.79	0.81	0.83	0.86
Rates	£M	0.00	0.00	0.00	0.00	0.27	0.55	0.56	0.58	0.60	0.61	0.63	0.65	0.67	0.69	0.70	0.72	0.75	0.77	0.79	0.81	0.83	0.86	0.88	0.91	0.47
Insurance	£M	0.00	0.00	0.00	0.00	0.34	0.69	0.71	0.73	0.75	0.77	0.79	0.81	0.84	0.86	0.88	0.91	0.94	0.96	0.99	1.02	1.05	1.08	1.11	1.14	0.58
Crown Estates Lease	£M	0.00	0.00	0.00	0.00	0.10	0.61	0.91	0.83	0.85	0.87	0.88	0.92	0.95	1.02	1.06	1.10	1.14	1.19	1.23	1.28	1.32	1.37	1.42	1.11	0.38
Total Annual Costs	£M	0.00	0.00	0.00	0.00	7.22	10.75	11.53	11.76	12.08	12.42	12.75	13.13	13.51	13.93	14.33	14.75	15.17	15.61	16.06	16.53	17.01	17.50	18.00	17.95	12.91
Depreciation	£M	0.00	0.00	0.52	1.59	2.69	10.14	14.89	14.89	14.89	14.89	14.89	14.89	14.89	14.89	14.89	14.89	14.89	14.37	13.30	12.20	4.75	0.00	0.00	0.00	0.00
Profit Before Interest and Tax	£M	0.00	0.00	-0.52	-1.59	-4.72	9.64	19.02	14.86	15.56	16.21	16.28	17.78	19.27	22.30	23.84	25.43	27.08	29.31	32.16	35.10	44.45	51.18	53.24	37.47	6.25
	£/MW	0	0	-2,602	-7,964	-23,575	48,207	95,093	74,301	77,776	81,039	81,386	88,878	96,353	111,502	119,177	127,137	135,392	146,555	160,793	175,496	222,264	255,925	266,179	187,341	31,254
	£/MWh	0	0	-2,602	-7,964	-57.70	19.66	29.09	22.73	23.79	24.79	24.90	27.19	29.48	34.11	36.46	38.89	41.42	44.83	49.19	53.69	67.99	78.29	81.43	76.41	38.24
Annual Average PBIT																										
	£M	21.23 2004 - 2027																								
	£/MW	106,163 2004 - 2027																								
	£/MWh	37.38 2004 - 2027																								
Interest on Finance	£M	0.00	0.18	0.56	0.97	3.57	5.42	5.42	5.06	4.70	4.34	3.98	3.62	3.25	2.89	2.53	2.17	1.81	1.45	1.08	0.72	0.36	0.00	0.00	0.00	0.00
Tax	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	2.23	3.91	5.07	6.40	7.53	8.99	9.88	10.71	11.50	12.26	13.00	13.74	14.48	15.22	15.87	11.17	1.82
Profit After Interest and Tax	£M	0.00	-0.18	-1.08	-2.56	-8.29	4.22	13.59	9.74	8.62	7.96	7.23	7.76	8.48	10.42	11.42	12.55	13.77	15.61	18.07	20.64	29.61	35.96	37.36	26.30	4.43
	£/MW	0	-888	-5,378	-12,796	-41,425	21,085	67,972	48,725	43,116	39,800	36,159	38,806	42,408	52,106	57,115	62,730	68,858	78,031	90,356	103,177	148,058	179,800	186,814	131,506	22,153
	£/MWh	0	-888	-5,378	-12,796	-101.38	8.60	20.79	14.91	13.19	12.18	11.06	11.87	12.97	15.94	17.47	19.19	21.06	23.87	27.64	31.56	45.29	55.00	57.15	53.64	27.11
Annual Average PAIT																										
	£M	12.15 2004 - 2027																								
	£/MW	60,762 2004 - 2027																								
	£/MWh	19.01 2004 - 2027																								
Cash Flow																										
Add Back Depreciation	£M	0.00	0.00	0.52	1.59	2.69	10.14	14.89	14.89	14.89	14.89	14.89	14.89	14.89	14.89	14.89	14.89	14.89	14.37	13.30	12.20	4.75	0.00	0.00	0.00	0.00
Add Receipts																										
Loan	£M	0.00	2.91	6.18	6.74	42.66	30.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subtract Payments																										
Capex	£M	0.00	7.81	16.08	16.50	111.68	71.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loan Repayments	£M	0.00	0.00	0.00	0.00	0.00	5.42	5.56	5.56	5.56	5.56	5.56	5.56	5.56	5.56	5.56	5.56	5.56	5.56	5.56	5.56	5.56	5.56	5.56	0.00	0.00
Total Cash Flow	£M	0.00	-5.07	-10.45	-10.73	-74.61	-32.00	22.92	19.07	17.95	17.29	16.56	17.09	17.81	19.75	20.75	21.87	23.10	24.41	25.81	27.27	28.80	35.96	37.36	26.30	4.43
	£/MW	0	-25,374	-52,271	-53,630	-373,066	-159,976	114,614	95,367	89,758	86,442	82,801	85,448	89,050	98,748	103,757	109,373	115,500	122,071	129,034	136,356	144,010	179,800	186,814	131,506	22,153
	£/MWh	0	-25,374	-52,271	-53,630	-373,066	-159,976	114,614	95,367	89,758	86,442	82,801	85,448	89,050	98,748	103,757	109,373	115,500	122,071	129,034	136,356	144,010	179,800	186,814	131,506	22,153
Annual Average Cash Flow																										
	£M	12.15 2004 - 2027																								
	£/MW	60,762 2004 - 2027																								
	£/MWh	-14.06 2004 - 2027																								
NPV Project Cashflow	£M	-£14.80																								

ANNEX F Profit/Loss Statements

Profit Statement - 200MW Offshore Wind Farm, Joint Venture Developer

	Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	
Income																											
Electricity Income	£M	0.00	0.00	0.00	0.00	1.85	10.15	17.12	18.34	18.71	19.02	18.74	19.90	21.04	23.74	24.91	26.12	27.38	28.70	30.06	31.48	32.95	34.48	36.08	28.30	9.86	
ROC Income	£M	0.00	0.00	0.00	0.00	3.08	19.00	26.05	20.83	21.42	22.02	22.65	23.28	23.94	24.62	25.31	26.02	26.76	27.51	28.29	29.09	29.91	30.75	31.62	24.38	8.36	
CCL Income	£M	0.00	0.00	0.00	0.00	0.27	1.38	2.27	2.34	2.40	2.47	2.54	2.61	2.69	2.76	2.84	2.92	3.00	3.09	3.17	3.26	3.36	3.45	3.55	2.74	0.94	
Total Income	£M	0.00	0.00	0.00	0.00	5.20	30.53	45.44	41.51	42.53	43.52	43.92	45.79	47.67	51.12	53.06	55.07	57.15	59.30	61.52	63.83	66.21	68.68	71.24	55.41	19.16	
Annual Costs																											
Routine O&M	£M	0.00	0.00	0.00	0.00	4.56	4.68	4.82	4.95	5.09	5.24	5.38	5.54	5.69	5.85	6.02	6.19	6.36	6.54	6.73	6.92	7.11	7.31	7.52	7.73	7.95	
Transmission Use of System Charge	£M	0.00	0.00	0.00	0.00	1.90	3.90	4.01	4.13	4.24	4.36	4.49	4.61	4.74	4.88	5.01	5.16	5.30	5.45	5.60	5.76	5.93	6.09	6.26	6.44	3.31	
Balancing Services Use of System Cost	£M	0.00	0.00	0.00	0.00	0.06	0.32	0.52	0.54	0.55	0.57	0.58	0.60	0.62	0.63	0.65	0.67	0.69	0.71	0.73	0.75	0.77	0.79	0.81	0.63	0.21	
Rates	£M	0.00	0.00	0.00	0.00	0.27	0.55	0.56	0.58	0.60	0.61	0.63	0.65	0.67	0.69	0.70	0.72	0.75	0.77	0.79	0.81	0.83	0.86	0.88	0.91	0.47	
Insurance	£M	0.00	0.00	0.00	0.00	0.34	0.69	0.71	0.73	0.75	0.77	0.79	0.81	0.84	0.86	0.88	0.91	0.94	0.96	0.99	1.02	1.05	1.08	1.11	1.14	0.58	
Crown Estates Lease	£M	0.00	0.00	0.00	0.00	0.10	0.61	0.91	0.83	0.85	0.87	0.88	0.92	0.95	1.02	1.06	1.10	1.14	1.19	1.23	1.28	1.32	1.37	1.42	1.11	0.38	
Total Annual Costs	£M	0.00	0.00	0.00	0.00	7.22	10.75	11.53	11.76	12.08	12.42	12.75	13.13	13.51	13.93	14.33	14.75	15.17	15.61	16.06	16.53	17.01	17.50	18.00	17.95	12.91	
Depreciation	£M	0.00	0.00	0.52	1.59	2.69	10.14	14.89	14.89	14.89	14.89	14.89	14.89	14.89	14.89	14.89	14.89	14.89	14.37	13.30	12.20	4.75	0.00	0.00	0.00	0.00	
Profit Before Interest and Tax	£M	0.00	0.00	-0.52	-1.59	-4.72	9.64	19.02	14.86	15.56	16.21	16.28	17.78	19.27	22.30	23.84	25.43	27.08	29.31	32.16	35.10	44.45	51.18	53.24	37.47	6.25	
	£/MW	0	0	-2.602	-7.964	-23.575	48.207	95.093	74.301	77.776	81.039	81.386	88.878	96.353	111.502	119.177	127.137	135.392	146.555	160.793	175.496	222.264	255.925	266.179	187.341	31.254	
	£/MWh					-57.70	19.66	29.09	22.73	23.79	24.79	24.90	27.19	29.48	34.11	36.46	38.89	41.42	44.83	49.19	53.69	67.99	78.29	81.43	76.41	38.24	
Annual Average PBIT																											
	£M	21.23 2004 - 2027																									
	£/MW	106,163 2004 - 2027																									
	£/MWh	37.38 2004 - 2027																									
Interest on Finance	£M	0.00	0.18	0.56	0.97	3.57	5.42	5.42	5.06	4.70	4.34	3.98	3.62	3.25	2.89	2.53	2.17	1.81	1.45	1.08	0.72	0.36	0.00	0.00	0.00	0.00	
Tax	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	2.23	3.91	5.07	6.40	7.53	8.99	9.88	10.71	11.50	12.26	13.00	13.74	14.48	15.22	15.87	11.17	1.82	
Profit After Interest and Tax	£M	0.00	-0.18	-1.08	-2.56	-8.29	4.22	13.59	9.74	8.62	7.96	7.23	7.76	8.48	10.42	11.42	12.55	13.77	15.61	18.07	20.64	29.61	35.96	37.36	26.30	4.43	
	£/MW	0	-888	-5,378	-12,796	-41,425	21,085	67,972	48,725	43,116	39,800	36,159	38,806	42,408	52,106	57,115	62,730	68,858	78,031	90,356	103,177	148,058	179,800	186,814	131,506	22,153	
	£/MWh					-101.38	8.60	20.79	14.91	13.19	12.18	11.06	11.87	12.97	15.94	17.47	19.19	21.06	23.87	27.64	31.56	45.29	55.00	57.15	53.64	27.11	
Annual Average PAIT																											
	£M	12.15 2004 - 2027																									
	£/MW	60,762 2004 - 2027																									
	£/MWh	19.01 2004 - 2027																									
Cash Flow																											
Add Back Depreciation	£M	0.00	0.00	0.52	1.59	2.69	10.14	14.89	14.89	14.89	14.89	14.89	14.89	14.89	14.89	14.89	14.89	14.89	14.37	13.30	12.20	4.75	0.00	0.00	0.00	0.00	
Add Receipts																											
Loan	£M	0.00	2.91	6.18	6.74	42.66	30.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Subtract Payments																											
Capex	£M	0.00	7.81	16.08	16.50	111.68	71.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Loan Repayments	£M	0.00	0.00	0.00	0.00	0.00	5.42	5.56	5.56	5.56	5.56	5.56	5.56	5.56	5.56	5.56	5.56	5.56	5.56	5.56	5.56	5.56	5.56	0.00	0.00	0.00	
Total Cash Flow	£M	0.00	-5.07	-10.45	-10.73	-74.61	-32.00	22.92	19.07	17.95	17.29	16.56	17.09	17.81	19.75	20.75	21.87	23.10	24.41	25.81	27.27	28.80	35.96	37.36	26.30	4.43	
	£/MW	0	-25,374	-52,271	-53,630	-373,066	-159,976	114,614	95,367	89,758	86,442	82,801	85,448	89,050	98,748	103,757	109,373	115,500	122,071	129,034	136,356	144,010	179,800	186,814	131,506	22,153	
	£/MWh					-913.01	-65.25	35.06	29.17	27.46	26.44	25.33	26.14	27.24	30.21	31.74	33.46	35.33	37.34	39.47	41.71	44.05	55.00	57.15	53.64	27.11	
Annual Average Cash Flow																											
	£M	12.15 2004 - 2027																									
	£/MW	60,762 2004 - 2027																									
	£/MWh	-14.06 2004 - 2027																									
NPV Project Cashflow	£M	£73.02																									

ANNEX F
Profit/Loss Statements

Profit Statement - 80MW Hydro Scheme, Utility Developer

	Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Income																										
Electricity Income	£M	0.00	0.00	0.00	0.00	2.05	9.21	9.94	10.89	11.36	11.80	11.87	12.87	13.89	14.54	14.66	14.88	15.15	15.50	15.92	16.43	17.02	17.71	18.42	19.16	9.96
ROC Income	£M	0.00	0.00	0.00	0.00	2.08	8.55	8.79	7.03	7.22	7.43	7.64	7.85	8.07	8.30	8.54	8.78	9.02	9.28	9.54	9.81	10.09	10.37	10.66	10.96	5.64
CCL Income	£M	0.00	0.00	0.00	0.00	0.18	0.76	0.78	0.80	0.82	0.84	0.87	0.89	0.92	0.94	0.97	1.00	1.03	1.05	1.08	1.11	1.15	1.18	1.21	1.25	0.64
Total Income	£M	0.00	0.00	0.00	0.00	4.31	18.51	19.50	18.71	19.40	20.07	20.37	21.62	22.89	23.79	24.17	24.65	25.20	25.83	26.55	27.35	28.25	29.25	30.29	31.37	16.24
Annual Costs																										
Routine O&M	£M	0.00	0.00	0.00	0.00	1.35	1.38	1.42	1.46	1.51	1.55	1.59	1.64	1.68	1.73	1.78	1.83	1.88	1.93	1.99	2.04	2.10	2.16	2.22	2.28	2.35
Transmission Use of System Charge	£M	0.00	0.00	0.00	0.00	1.52	1.56	1.61	1.65	1.70	1.75	1.79	1.85	1.90	1.95	2.01	2.06	2.12	2.18	2.24	2.31	2.37	2.44	2.51	2.58	2.65
Balancing Services Use of System Cost	£M	0.00	0.00	0.00	0.00	0.04	0.17	0.18	0.18	0.19	0.19	0.20	0.20	0.21	0.22	0.22	0.23	0.24	0.24	0.25	0.26	0.26	0.27	0.28	0.29	0.15
Rates	£M	0.00	0.00	0.00	0.00	0.43	0.44	0.45	0.46	0.48	0.49	0.50	0.52	0.53	0.55	0.56	0.58	0.60	0.61	0.63	0.65	0.67	0.69	0.70	0.72	0.74
Insurance	£M	0.00	0.00	0.00	0.00	0.27	0.28	0.28	0.29	0.30	0.31	0.32	0.33	0.33	0.34	0.35	0.36	0.37	0.38	0.40	0.41	0.42	0.43	0.44	0.45	0.47
Total Annual Costs	£M	0.00	0.00	0.00	0.00	3.60	3.83	3.94	4.05	4.17	4.29	4.41	4.53	4.66	4.79	4.92	5.06	5.21	5.35	5.50	5.66	5.82	5.98	6.15	6.33	6.36
Depreciation	£M	0.00	0.00	0.26	0.80	1.36	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.00	5.46	4.91	0.00	0.00	0.00	0.00	0.00
Profit Before Interest and Tax	£M	0.00	0.00	-0.26	-0.80	-0.65	8.41	9.29	8.39	8.97	9.52	9.70	10.82	11.96	12.73	12.98	13.32	13.73	14.48	15.58	16.78	22.43	23.27	24.14	25.04	9.88
	£/MW	0	0	-3.285	-10.051	-8.123	105.118	116.158	104.902	112.082	118.991	121.274	135.264	149.508	159.167	162.257	166.512	171.625	180.949	194.751	209.802	280.399	290.897	301.764	313.013	123.516
	£/MWh					-11.79	38.14	42.14	38.06	40.66	43.17	44.00	49.08	54.24	57.75	58.87	60.41	62.27	65.65	70.66	76.12	101.73	105.54	109.48	113.57	89.63
Annual Average PBIT																										
	£M	11.65 2004 - 2027																								
	£/MW	145,687 2004 - 2027																								
	£/MWh	62.35 2004 - 2027																								
Interest on Finance	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tax	£M	0.00	0.00	-0.30	-0.83	-1.25	-6.24	0.60	1.67	2.53	3.20	3.64	4.26	4.82	5.22	5.41	5.60	5.79	5.99	6.20	6.42	6.66	6.93	7.21	7.49	2.94
Profit After Interest and Tax	£M	0.00	0.00	0.03	0.03	0.60	14.65	8.70	6.72	6.44	6.32	6.06	6.56	7.14	7.52	7.57	7.72	7.94	8.49	9.38	10.36	15.77	16.34	16.94	17.56	6.94
	£/MW	0	0	411	333	7,475	183,158	108,698	83,978	80,493	78,946	75,756	81,958	89,236	93,978	94,626	96,468	99,195	106,068	117,280	129,539	197,088	204,235	211,690	219,450	86,717
	£/MWh					10.85	66.45	39.44	30.47	29.20	28.64	27.49	29.74	32.38	34.10	34.33	35.00	35.99	38.48	42.55	47.00	71.51	74.10	76.80	79.62	62.92
Annual Average PAIT																										
	£M	8.16 2004 - 2027																								
	£/MW	101,949 2004 - 2027																								
	£/MWh	44.15 2004 - 2027																								
Cash Flow																										
Add Back Depreciation	£M	0.00	0.00	0.26	0.80	1.36	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.00	5.46	4.91	0.00	0.00	0.00	0.00	0.00
Add Receipts																										
Loan	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subtract Payments																										
Capex	£M	0.00	3.94	8.12	8.33	73.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loan Repayments	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cash Flow	£M	0.00	-3.94	-7.82	-7.50	-71.65	20.92	14.96	12.98	12.71	12.58	12.33	12.82	13.41	13.78	13.84	13.98	14.20	14.49	14.84	15.27	15.77	16.34	16.94	17.56	6.94
	£/MW	0	-49,270	-97,801	-93,752	-895,566	261,487	187,027	162,307	158,822	157,275	154,085	160,287	167,565	172,307	172,955	174,797	177,524	181,112	185,558	190,875	197,088	204,235	211,690	219,450	86,717
	£/MWh					-1,299.69	94.87	67.86	58.89	57.62	57.06	55.90	58.15	60.79	62.52	62.75	63.42	64.41	65.71	67.32	69.25	71.51	74.10	76.80	79.62	62.92
Annual Average Cash Flow																										
	£M	8.16 2004 - 2027																								
	£/MW	101,949 2004 - 2027																								
	£/MWh	1.51 2004 - 2027																								
NPV Project Cashflow	£M	£35.29																								

ANNEX F Profit/Loss Statements

Profit Statement - 80MW Hydro Scheme, Private Developer

	Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Income																										
Electricity Income	£M	0.00	0.00	0.00	0.00	2.05	9.21	9.94	10.89	11.36	11.80	11.87	12.87	13.89	14.54	14.66	14.88	15.15	15.50	15.92	16.43	17.02	17.71	18.42	19.16	9.96
ROC Income	£M	0.00	0.00	0.00	0.00	2.08	8.55	8.79	7.03	7.22	7.43	7.64	7.85	8.07	8.30	8.54	8.78	9.02	9.28	9.54	9.81	10.09	10.37	10.66	10.96	5.64
CCL Income	£M	0.00	0.00	0.00	0.00	0.18	0.76	0.78	0.80	0.82	0.84	0.87	0.89	0.92	0.94	0.97	1.00	1.03	1.05	1.08	1.11	1.15	1.18	1.21	1.25	0.64
Total Income	£M	0.00	0.00	0.00	0.00	4.31	18.51	19.50	18.71	19.40	20.07	20.37	21.62	22.89	23.79	24.17	24.65	25.20	25.83	26.55	27.35	28.25	29.25	30.29	31.37	16.24
Annual Costs																										
Routine O&M	£M	0.00	0.00	0.00	0.00	1.35	1.38	1.42	1.46	1.51	1.55	1.59	1.64	1.68	1.73	1.78	1.83	1.88	1.93	1.99	2.04	2.10	2.16	2.22	2.28	2.35
Transmission Use of System Charge	£M	0.00	0.00	0.00	0.00	1.52	1.56	1.61	1.65	1.70	1.75	1.79	1.85	1.90	1.95	2.01	2.06	2.12	2.18	2.24	2.31	2.37	2.44	2.51	2.58	2.65
Balancing Services Use of System Cost	£M	0.00	0.00	0.00	0.00	0.04	0.17	0.18	0.18	0.19	0.20	0.20	0.21	0.22	0.22	0.22	0.23	0.24	0.24	0.25	0.26	0.26	0.27	0.28	0.29	0.15
Rates	£M	0.00	0.00	0.00	0.00	0.43	0.44	0.45	0.46	0.48	0.49	0.50	0.52	0.53	0.55	0.56	0.58	0.60	0.61	0.63	0.65	0.67	0.69	0.70	0.72	0.74
Insurance	£M	0.00	0.00	0.00	0.00	0.27	0.28	0.28	0.29	0.30	0.31	0.32	0.33	0.33	0.34	0.35	0.36	0.37	0.38	0.40	0.41	0.42	0.43	0.44	0.45	0.47
Total Annual Costs	£M	0.00	0.00	0.00	0.00	3.60	3.83	3.94	4.05	4.17	4.29	4.41	4.53	4.66	4.79	4.92	5.06	5.21	5.35	5.50	5.66	5.82	5.98	6.15	6.33	6.36
Depreciation	£M	0.00	0.00	0.26	0.80	1.36	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.00	5.46	4.91	0.00	0.00	0.00	0.00	0.00
Profit Before Interest and Tax	£M	0.00	0.00	-0.26	-0.80	-0.65	8.41	9.29	8.39	8.97	9.52	9.70	10.82	11.96	12.73	12.98	13.32	13.73	14.48	15.58	16.78	22.43	23.27	24.14	25.04	9.88
	£/MW	0	0	-3,285	-10,051	-8,123	105,118	116,158	104,902	112,082	118,991	121,274	135,264	149,508	159,167	162,257	166,512	171,625	180,949	194,751	209,802	280,399	290,897	301,764	313,013	123,516
	£/MWh					-11.79	38.14	42.14	38.06	40.66	43.17	44.00	49.08	54.24	57.75	58.87	60.41	62.27	65.65	70.66	76.12	101.73	105.54	109.48	113.57	89.63
Annual Average PBIT	£M	11.65 2004 - 2027																								
	£/MW	145,687 2004 - 2027																								
	£/MWh	62.35 2004 - 2027																								
Interest on Finance	£M	0.00	0.15	0.48	0.83	3.75	3.94	3.67	3.41	3.15	2.89	2.62	2.36	2.10	1.84	1.57	1.31	1.05	0.79	0.52	0.26	0.00	0.00	0.00	0.00	0.00
Tax	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65	1.58	2.34	2.85	3.56	4.19	4.66	4.94	5.21	5.48	5.75	6.04	6.34	6.66	6.93	7.21	7.49	2.94
Profit After Interest and Tax	£M	0.00	-0.15	-0.74	-1.64	-4.40	4.47	5.62	4.33	4.24	4.29	4.22	4.90	5.67	6.23	6.47	6.80	7.20	7.93	9.02	10.18	15.77	16.34	16.94	17.56	6.94
	£/MW	0	-1,922	-9,280	-20,467	-55,045	55,912	70,233	54,127	52,938	53,687	52,793	61,292	70,866	77,904	80,848	84,987	90,010	99,179	112,688	127,243	197,088	204,235	211,690	219,450	86,717
	£/MWh					-79.88	20.29	25.48	19.64	19.21	19.48	19.15	22.24	25.71	28.26	29.33	30.83	32.66	35.98	40.88	46.17	71.51	74.10	76.80	79.62	62.92
Annual Average PAIT	£M	6.59 2004 - 2027																								
	£/MW	82,382 2004 - 2027																								
	£/MWh	33.35 2004 - 2027																								
Cash Flow																										
Add Back Depreciation	£M	0.00	0.00	0.26	0.80	1.36	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.00	5.46	4.91	0.00	0.00	0.00	0.00	0.00
Add Receipts																										
Loan	£M	0.00	2.72	5.76	6.25	51.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subtract Payments																										
Capex	£M	0.00	3.94	8.12	8.33	73.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loan Repayments	£M	0.00	0.00	0.00	0.00	0.71	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37	4.37
Total Cash Flow	£M	0.00	-1.38	-2.84	-2.92	-25.76	6.37	7.51	6.22	6.13	6.19	6.12	6.80	7.56	8.12	8.36	8.69	9.09	9.56	10.10	10.71	15.77	16.34	16.94	17.56	6.94
	£/MW	0	-17,245	-35,524	-36,447	-322,012	79,569	93,889	77,783	76,594	77,343	76,450	84,948	94,523	101,560	104,504	108,643	113,666	119,551	126,293	133,906	197,088	204,235	211,690	219,450	86,717
	£/MWh					-467.32	28.87	34.06	28.22	27.79	28.06	27.74	30.82	34.29	36.85	37.92	39.42	41.24	43.37	45.82	48.58	71.51	74.10	76.80	79.62	62.92
Annual Average Cash Flow	£M	6.59 2004 - 2027																								
	£/MW	82,382 2004 - 2027																								
	£/MWh	20.51 2004 - 2027																								
NPV Project Cashflow	£M	£7.47																								

ANNEX F Profit/Loss Statements

Profit Statement - 80MW Hydro Scheme, Joint Venture Developer

	Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	
Income																											
Electricity Income	£M	0.00	0.00	0.00	0.00	2.05	9.21	9.94	10.89	11.36	11.80	11.87	12.87	13.89	14.54	14.66	14.88	15.15	15.50	15.92	16.43	17.02	17.71	18.42	19.16	9.96	
ROC Income	£M	0.00	0.00	0.00	0.00	2.08	8.55	8.79	7.03	7.22	7.43	7.64	7.85	8.07	8.30	8.54	8.78	9.02	9.28	9.54	9.81	10.09	10.37	10.66	10.96	5.64	
CCL Income	£M	0.00	0.00	0.00	0.00	0.18	0.76	0.78	0.80	0.82	0.84	0.87	0.89	0.92	0.94	0.97	1.00	1.03	1.05	1.08	1.11	1.15	1.18	1.21	1.25	0.64	
Total Income	£M	0.00	0.00	0.00	0.00	4.31	18.51	19.50	18.71	19.40	20.07	20.37	21.62	22.89	23.79	24.17	24.65	25.20	25.83	26.55	27.35	28.25	29.25	30.29	31.37	16.24	
Annual Costs																											
Routine O&M	£M	0.00	0.00	0.00	0.00	1.35	1.38	1.42	1.46	1.51	1.55	1.59	1.64	1.68	1.73	1.78	1.83	1.88	1.93	1.99	2.04	2.10	2.16	2.22	2.28	2.35	
Transmission Use of System Charge	£M	0.00	0.00	0.00	0.00	1.52	1.56	1.61	1.65	1.70	1.75	1.79	1.85	1.90	1.95	2.01	2.06	2.12	2.18	2.24	2.31	2.37	2.44	2.51	2.58	2.65	
Balancing Services Use of System Cost	£M	0.00	0.00	0.00	0.00	0.04	0.17	0.18	0.18	0.19	0.19	0.20	0.20	0.21	0.22	0.22	0.23	0.24	0.24	0.25	0.26	0.26	0.27	0.28	0.29	0.15	
Rates	£M	0.00	0.00	0.00	0.00	0.43	0.44	0.45	0.46	0.48	0.49	0.50	0.52	0.53	0.55	0.56	0.58	0.60	0.61	0.63	0.65	0.67	0.69	0.70	0.72	0.74	
Insurance	£M	0.00	0.00	0.00	0.00	0.27	0.28	0.28	0.29	0.30	0.31	0.32	0.33	0.33	0.34	0.35	0.36	0.37	0.38	0.40	0.41	0.42	0.43	0.44	0.45	0.47	
Total Annual Costs	£M	0.00	0.00	0.00	0.00	3.60	3.83	3.94	4.05	4.17	4.29	4.41	4.53	4.66	4.79	4.92	5.06	5.21	5.35	5.50	5.66	5.82	5.98	6.15	6.33	6.36	
Depreciation	£M	0.00	0.00	0.26	0.80	1.36	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.00	5.46	4.91	0.00	0.00	0.00	0.00	0.00	
Profit Before Interest and Tax	£M	0.00	0.00	-0.26	-0.80	-0.65	8.41	9.29	8.39	8.97	9.52	9.70	10.82	11.96	12.73	12.98	13.32	13.73	14.48	15.58	16.78	22.43	23.27	24.14	25.04	9.88	
	£/MW	0	0	-3.285	-10.051	-8.123	105.118	116.158	104.902	112.082	118.991	121.274	135.264	149.508	159.167	162.257	166.512	171.625	180.949	194.751	209.802	280.399	290.897	301.764	313.013	123.516	
	£/MWh					-11.79	38.14	42.14	38.06	40.66	43.17	44.00	49.08	54.24	57.75	58.87	60.41	62.27	65.65	70.66	76.12	101.73	105.54	109.48	113.57	89.63	
Annual Average PBIT	£M	11.65 2004-2027																									
	£/MW	145.687 2004-2027																									
	£/MWh	62.35 2004-2027																									
Interest on Finance	£M	0.00	0.13	0.41	0.71	3.18	3.32	3.10	2.88	2.66	2.44	2.22	1.99	1.77	1.55	1.33	1.11	0.89	0.66	0.44	0.22	0.00	0.00	0.00	0.00	0.00	
Tax	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.81	1.73	2.47	2.98	3.67	4.29	4.75	5.01	5.27	5.53	5.79	6.06	6.35	6.66	6.93	7.21	7.49	2.94	
Profit After Interest and Tax	£M	0.00	-0.13	-0.67	-1.51	-3.83	5.09	6.12	4.70	4.58	4.61	4.51	5.16	5.90	6.43	6.64	6.94	7.32	8.02	9.07	10.21	15.77	16.34	16.94	17.56	6.94	
	£/MW	0	-1.626	-8.358	-18.865	-47.826	63.564	76.520	58.769	57.223	57.615	56.364	64.506	73.723	80.404	82.991	86.772	91.438	100.250	113.402	127.600	197.088	204.235	211.690	219.450	86.717	
	£/MWh					-69.41	23.06	27.76	21.32	20.76	20.90	20.45	23.40	26.75	29.17	30.11	31.48	33.18	36.37	41.14	46.29	71.51	74.10	76.80	79.62	62.92	
Annual Average PAIT	£M	6.78 2004-2027																									
	£/MW	84.735 2004-2027																									
	£/MWh	34.65 2004-2027																									
Cash Flow																											
Add Back Depreciation	£M	0.00	0.00	0.26	0.80	1.36	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.27	6.00	5.46	4.91	0.00	0.00	0.00	0.00	0.00	
Add Receipts																											
Loan	£M	0.00	2.30	4.87	5.29	43.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Subtract Payments																											
Capex	£M	0.00	3.94	8.12	8.33	73.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Loan Repayments	£M	0.00	0.00	0.00	0.00	0.71	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	0.00	0.00	0.00	0.00	0.00	
Total Cash Flow	£M	0.00	-1.77	-3.65	-3.75	-33.12	7.66	8.69	7.27	7.15	7.18	7.08	7.73	8.47	9.00	9.21	9.51	9.89	10.33	10.84	11.42	15.77	16.34	16.94	17.56	6.94	
	£/MW	0	-22.172	-45.673	-46.861	-414.016	95.723	108.679	90.927	89.381	89.774	88.523	96.664	105.881	112.562	115.149	118.931	123.597	129.124	135.509	142.765	197.088	204.235	211.690	219.450	86.717	
	£/MWh					-600.84	34.73	39.43	32.99	32.43	32.57	32.12	35.07	38.42	40.84	41.78	43.15	44.84	46.85	49.16	51.80	71.51	74.10	76.80	79.62	62.92	
Annual Average Cash Flow	£M	6.78 2004-2027																									
	£/MW	84735.34 2004-2027																									
	£/MWh	17.16 2004-2027																									
NPV Project Cashflow	£M	£51.66																									

ANNEX F Profit/Loss Statements

Profit Statement - 5MW Dammed Hydro, Utility Developer

	Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Income																										
Electricity Income	£M	0.00	0.00	0.00	0.00	0.13	0.58	0.63	0.69	0.72	0.74	0.75	0.81	0.88	0.92	0.92	0.94	0.96	0.98	1.00	1.04	1.07	1.12	1.16	1.21	0.63
ROC Income	£M	0.00	0.00	0.00	0.00	0.13	0.53	0.55	0.44	0.45	0.46	0.48	0.49	0.50	0.52	0.53	0.55	0.56	0.58	0.60	0.61	0.63	0.65	0.67	0.69	0.35
CCL Income	£M	0.00	0.00	0.00	0.00	0.01	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.04
Total Income	£M	0.00	0.00	0.00	0.00	0.27	1.16	1.22	1.18	1.22	1.26	1.28	1.36	1.44	1.50	1.52	1.55	1.58	1.62	1.67	1.72	1.78	1.84	1.90	1.97	1.02
Annual Costs																										
Routine O&M	£M	0.00	0.00	0.00	0.00	0.13	0.13	0.14	0.14	0.15	0.15	0.15	0.16	0.16	0.17	0.17	0.18	0.18	0.19	0.19	0.20	0.20	0.21	0.22	0.22	0.23
Transmission Use of System Charge	£M	0.00	0.00	0.00	0.00	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.11
Balancing Services Use of System Cost	£M	0.00	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.01
Rates	£M	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05
Insurance	£M	0.00	0.00	0.00	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03
Total Annual Costs	£M	0.00	0.00	0.00	0.00	0.23	0.23	0.24	0.24	0.25	0.26	0.27	0.27	0.28	0.29	0.30	0.31	0.31	0.32	0.33	0.34	0.35	0.36	0.37	0.38	0.40
Depreciation	£M	0.00	0.00	0.02	0.07	0.12	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.51	0.47	0.42	0.00	0.00	0.00	0.00	0.00
Profit Before Interest and Tax	£M	0.00	0.00	-0.02	-0.07	-0.08	0.40	0.45	0.40	0.43	0.47	0.48	0.55	0.62	0.67	0.69	0.71	0.74	0.79	0.87	0.96	1.43	1.48	1.53	1.59	0.62
	£/MWh	0	0	-4.481	-13.710	-15.590	79.416	90.589	79.491	86.777	93.791	96.137	110.299	124.718	134.512	137.677	142.020	147.231	157.857	174.240	191.948	285.016	295.668	306.694	318.106	123.887
	£/MWh					-22.63	28.81	32.87	28.84	31.48	34.03	34.88	40.02	45.25	48.80	49.95	51.53	53.42	57.27	63.22	69.64	103.41	107.27	111.27	115.41	89.90
Annual Average PBIT	£M	0.65 2004 - 2027																								
	£/MWh	130,929 2004 - 2027																								
	£/MWh	55.94 2004 - 2027																								
Interest on Finance	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tax	£M	0.00	0.00	-0.03	-0.07	-0.11	-0.54	-0.13	0.02	0.08	0.12	0.15	0.18	0.21	0.23	0.25	0.26	0.27	0.28	0.29	0.30	0.31	0.32	0.33	0.35	0.13
Profit After Interest and Tax	£M	0.00	0.00	0.00	0.00	0.03	0.94	0.59	0.38	0.35	0.34	0.33	0.37	0.41	0.44	0.44	0.45	0.47	0.51	0.59	0.66	1.12	1.16	1.20	1.24	0.49
	£/MWh	0	0	560	454	5,686	187,220	117,271	75,275	69,800	68,921	65,986	73,471	82,051	87,688	88,652	90,913	94,133	102,777	117,117	132,662	223,403	231,521	239,981	248,781	97,011
	£/MWh					8.25	67.93	42.55	27.31	25.32	25.01	23.94	26.66	29.77	31.81	32.16	32.98	34.15	37.29	42.49	48.13	81.05	84.00	87.07	90.26	70.39
Annual Average PAIT	£M	0.52 2004 - 2027																								
	£/MWh	104,222 2004 - 2027																								
	£/MWh	45.17 2004 - 2027																								
Cash Flow																										
Add Back Depreciation	£M	0.00	0.00	0.02	0.07	0.12	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.51	0.47	0.42	0.00	0.00	0.00	0.00	0.00
Add Receipts																										
Loan	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subtract Payments																										
Capex	£M	0.00	0.34	0.69	0.71	6.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loan Repayments	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cash Flow	£M	0.00	-0.34	-0.67	-0.64	-6.13	1.47	1.12	0.91	0.88	0.88	0.86	0.90	0.94	0.97	0.98	0.99	1.00	1.03	1.05	1.08	1.12	1.16	1.20	1.24	0.49
	£/MWh	0	-67.208	-133.407	-127.883	#####	294.066	224.117	182.121	176.646	175.767	172.832	180.317	188.896	194.534	195.498	197.758	200.979	205.143	210.252	216.328	223.403	231.521	239.981	248.781	97.011
	£/MWh					-1,779.40	106.69	81.31	66.08	64.09	63.77	62.71	65.42	68.53	70.58	70.93	71.75	72.92	74.43	76.28	78.49	81.05	84.00	87.07	90.26	70.39
Annual Average Cash Flow	£M	0.52 2004 - 2027																								
	£/MWh	104,222 2004 - 2027																								
	£/MWh	-12.98 2004 - 2027																								
NPV Project Cashflow	£M	£1.49																								

ANNEX F Profit/Loss Statements

Profit Statement - 5MW Dammed Hydro, Private Developer

	Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	
Income																											
Electricity Income	£M	0.00	0.00	0.00	0.00	0.13	0.58	0.63	0.69	0.72	0.74	0.75	0.81	0.88	0.92	0.92	0.94	0.96	0.98	1.00	1.04	1.07	1.12	1.16	1.21	0.63	
ROC Income	£M	0.00	0.00	0.00	0.00	0.13	0.53	0.55	0.44	0.45	0.46	0.48	0.49	0.50	0.52	0.53	0.55	0.56	0.58	0.60	0.61	0.63	0.65	0.67	0.69	0.35	
CCL Income	£M	0.00	0.00	0.00	0.00	0.01	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.04	
Total Income	£M	0.00	0.00	0.00	0.00	0.27	1.16	1.22	1.18	1.22	1.26	1.28	1.36	1.44	1.50	1.52	1.55	1.58	1.62	1.67	1.72	1.78	1.84	1.90	1.97	1.02	
Annual Costs																											
Routine O&M	£M	0.00	0.00	0.00	0.00	0.13	0.13	0.14	0.14	0.15	0.15	0.15	0.16	0.16	0.17	0.17	0.18	0.18	0.19	0.19	0.20	0.20	0.21	0.22	0.22	0.23	
Transmission Use of System Charge	£M	0.00	0.00	0.00	0.00	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.11	
Balancing Services Use of System Cost	£M	0.00	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.01	
Rates	£M	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	
Insurance	£M	0.00	0.00	0.00	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	
Total Annual Costs	£M	0.00	0.00	0.00	0.00	0.23	0.23	0.24	0.24	0.25	0.26	0.27	0.27	0.28	0.29	0.30	0.31	0.31	0.32	0.33	0.34	0.35	0.36	0.37	0.38	0.40	
Depreciation	£M	0.00	0.00	0.02	0.07	0.12	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.51	0.47	0.42	0.00	0.00	0.00	0.00	0.00	
Profit Before Interest and Tax	£M	0.00	0.00	-0.02	-0.07	-0.08	0.40	0.45	0.40	0.43	0.47	0.48	0.55	0.62	0.67	0.69	0.71	0.74	0.79	0.87	0.96	1.43	1.48	1.53	1.59	0.62	
	£/MW	0	0	-4.481	-13.710	-15.590	79.416	90.589	79.491	86.777	93.791	96.137	110.299	124.718	134.512	137.677	142.020	147.231	157.857	174.240	191.948	285.016	295.668	306.694	318.106	123.887	
	£/MWh					-22.63	28.81	32.87	28.84	31.48	34.03	34.88	40.02	45.25	48.80	49.95	51.53	53.42	57.27	63.22	69.64	103.41	107.27	111.27	115.41	89.90	
Annual Average PBIT																											
	£M	0.65 2004 - 2027																									
	£/MW	130.929 2004 - 2027																									
	£/MWh	55.94 2004 - 2027																									
Interest on Finance	£M	0.00	0.01	0.03	0.05	0.25	0.26	0.24	0.22	0.21	0.19	0.17	0.16	0.14	0.12	0.10	0.09	0.07	0.05	0.03	0.02	0.00	0.00	0.00	0.00	0.00	
Tax	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.07	0.11	0.15	0.20	0.24	0.26	0.28	0.31	0.33	0.35	0.38	0.41	0.43	0.46	0.47	0.13	
Profit After Interest and Tax	£M	0.00	-0.01	-0.05	-0.12	-0.32	0.14	0.21	0.17	0.19	0.20	0.20	0.24	0.29	0.32	0.33	0.34	0.36	0.41	0.48	0.56	1.02	1.04	1.08	1.12	0.49	
	£/MW	0	-2,016	-10,771	-24,640	-64,825	27,682	42,304	34,655	38,525	40,943	40,000	48,358	57,132	63,061	65,050	68,247	72,314	81,666	96,521	112,330	203,020	208,746	215,306	223,140	97,042	
	£/MWh					-94.08	10.04	15.35	12.57	13.98	14.85	14.51	17.54	20.73	22.88	23.60	24.76	26.24	29.63	35.02	40.75	73.66	75.74	78.12	80.96	70.42	
Annual Average PAIT																											
	£M	0.36 2004 - 2027																									
	£/MW	72.241 2004 - 2027																									
	£/MWh	28.92 2004 - 2027																									
Cash Flow																											
Add Back Depreciation	£M	0.00	0.00	0.02	0.07	0.12	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.51	0.47	0.42	0.00	0.00	0.00	0.00	0.00	
Add Receipts																											
Loan	£M	0.00	0.18	0.38	0.41	3.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Subtract Payments																											
Capex	£M	0.00	0.34	0.69	0.71	6.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Loan Repayments	£M	0.00	0.00	0.00	0.00	0.04	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.00	0.00	0.00	0.00	0.00	
Total Cash Flow	£M	0.00	-0.17	-0.35	-0.36	-3.14	0.39	0.46	0.42	0.44	0.45	0.45	0.49	0.53	0.56	0.57	0.59	0.61	0.63	0.66	0.69	1.02	1.04	1.08	1.12	0.49	
	£/MW	0	-33,604	-69,224	-71,024	-627,493	77,046	91,668	84,019	87,889	90,308	89,364	97,722	106,496	112,425	114,415	117,611	121,678	126,550	132,175	138,514	203,020	208,746	215,306	223,140	97,042	
	£/MWh					-910.65	27.95	33.26	30.48	31.89	32.76	32.42	35.45	38.64	40.79	41.51	42.67	44.15	45.91	47.95	50.25	73.66	75.74	78.12	80.96	70.42	
Annual Average Cash Flow																											
	£M	0.36 2004 - 2027																									
	£/MW	72.241 2004 - 2027																									
	£/MWh	2.11 2004 - 2027																									
NPV Project Cashflow	£M	-£0.60																									

ANNEX F Profit/Loss Statements

Profit Statement - 5MW Dammed Hydro, Joint Venture Developer

	Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Income																										
Electricity Income	£M	0.00	0.00	0.00	0.00	0.13	0.58	0.63	0.69	0.72	0.74	0.75	0.81	0.88	0.92	0.92	0.94	0.96	0.98	1.00	1.04	1.07	1.12	1.16	1.21	0.63
ROC Income	£M	0.00	0.00	0.00	0.00	0.13	0.53	0.55	0.44	0.45	0.46	0.48	0.49	0.50	0.52	0.53	0.55	0.56	0.58	0.60	0.61	0.63	0.65	0.67	0.69	0.35
CCL Income	£M	0.00	0.00	0.00	0.00	0.01	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.04
Total Income	£M	0.00	0.00	0.00	0.00	0.27	1.16	1.22	1.18	1.22	1.26	1.28	1.36	1.44	1.50	1.52	1.55	1.58	1.62	1.67	1.72	1.78	1.84	1.90	1.97	1.02
Annual Costs																										
Routine O&M	£M	0.00	0.00	0.00	0.00	0.13	0.13	0.14	0.14	0.15	0.15	0.15	0.16	0.16	0.17	0.17	0.18	0.18	0.19	0.19	0.20	0.20	0.21	0.22	0.22	0.23
Transmission Use of System Charge	£M	0.00	0.00	0.00	0.00	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.11
Balancing Services Use of System Cost	£M	0.00	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.01
Rates	£M	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05
Insurance	£M	0.00	0.00	0.00	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03
Total Annual Costs	£M	0.00	0.00	0.00	0.00	0.23	0.23	0.24	0.24	0.25	0.26	0.27	0.27	0.28	0.29	0.30	0.31	0.31	0.32	0.33	0.34	0.35	0.36	0.37	0.38	0.40
Depreciation	£M	0.00	0.00	0.02	0.07	0.12	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.51	0.47	0.42	0.00	0.00	0.00	0.00	0.00
Profit Before Interest and Tax	£M	0.00	0.00	-0.02	-0.07	-0.08	0.40	0.45	0.40	0.43	0.47	0.48	0.55	0.62	0.67	0.69	0.71	0.74	0.79	0.87	0.96	1.43	1.48	1.53	1.59	0.62
	£/MW	0	0	-4.481	-13.710	-15.590	79.416	90.589	79.491	86.777	93.791	96.137	110.299	124.718	134.512	137.677	142.020	147.231	157.857	174.240	191.948	285.016	295.668	306.694	318.106	123.887
	£/MWh					-22.63	28.81	32.87	28.84	31.48	34.03	34.88	40.02	45.25	48.80	49.95	51.53	53.42	57.27	63.22	69.64	103.41	107.27	111.27	115.41	89.90
Annual Average PBIT																										
	£M	0.65 2004 - 2027																								
	£/MW	130.929 2004 - 2027																								
	£/MWh	55.94 2004 - 2027																								
Interest on Finance	£M	0.00	0.01	0.03	0.04	0.20	0.21	0.19	0.18	0.17	0.15	0.14	0.12	0.11	0.10	0.08	0.07	0.06	0.04	0.03	0.01	0.00	0.00	0.00	0.00	0.00
Tax	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.08	0.12	0.16	0.21	0.24	0.27	0.29	0.31	0.33	0.36	0.38	0.41	0.43	0.46	0.47	0.13
Profit After Interest and Tax	£M	0.00	-0.01	-0.05	-0.11	-0.27	0.19	0.26	0.22	0.23	0.23	0.26	0.30	0.33	0.34	0.35	0.37	0.41	0.49	0.56	1.02	1.04	1.08	1.12	0.49	
	£/MW	0	-1.613	-9.513	-22.454	-54.978	38.120	52.046	43.701	45.289	46.797	45.148	52.798	60.926	66.283	67.761	70.466	74.058	82.951	97.361	112.742	203.020	208.746	215.306	223.140	97.042
	£/MWh					-79.79	13.83	18.88	15.86	16.43	16.98	16.38	19.16	22.10	24.05	24.58	25.57	26.87	30.10	35.32	40.90	73.66	75.74	78.12	80.96	70.42
Annual Average PAIT																										
	£M	0.38 2004 - 2027																								
	£/MW	75.631 2004 - 2027																								
	£/MWh	30.77 2004 - 2027																								
Cash Flow																										
Add Back Depreciation	£M	0.00	0.00	0.02	0.07	0.12	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.51	0.47	0.42	0.00	0.00	0.00	0.00	0.00
Add Receipts																										
Loan	£M	0.00	0.14	0.30	0.33	2.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subtract Payments																										
Capex	£M	0.00	0.34	0.69	0.71	6.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Loan Repayments	£M	0.00	0.00	0.00	0.00	0.04	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.00	0.00	0.00	0.00	0.00
Total Cash Flow	£M	0.00	-0.20	-0.42	-0.43	-3.76	0.50	0.57	0.52	0.53	0.54	0.53	0.57	0.61	0.64	0.64	0.66	0.68	0.70	0.72	0.75	1.02	1.04	1.08	1.12	0.49
	£/MW	0	-40.325	-83.068	-85.228	-752.992	99.082	113.008	104.663	106.250	107.758	106.109	113.759	121.888	127.245	128.723	131.427	135.020	139.432	144.613	150.524	203.020	208.746	215.306	223.140	97.042
	£/MWh					-1,092.78	35.95	41.00	37.97	38.55	39.10	38.50	41.27	44.22	46.17	46.70	47.68	48.99	50.59	52.47	54.61	73.66	75.74	78.12	80.96	70.42
Annual Average Cash Flow																										
	£M	0.38 2004 - 2027																								
	£/MW	75.631 2004 - 2027																								
	£/MWh	-2.39 2004 - 2027																								
NPV Project Cashflow	£M	£1.99																								

ANNEX F Profit/Loss Statements

Profit Statement - 1MW RoR Hydro, Utility Developer

	Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Income																										
Electricity Income	£M	0.00	0.00	0.00	0.00	0.03	0.11	0.12	0.13	0.13	0.13	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.25	0.26	0.14
ROC Income	£M	0.00	0.00	0.00	0.00	0.04	0.16	0.17	0.13	0.14	0.14	0.14	0.15	0.15	0.16	0.16	0.17	0.17	0.18	0.18	0.19	0.19	0.20	0.20	0.21	0.11
CCL Income	£M	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01
Total Income	£M	0.00	0.00	0.00	0.00	0.07	0.29	0.30	0.27	0.28	0.29	0.29	0.30	0.32	0.34	0.35	0.37	0.38	0.39	0.41	0.42	0.44	0.46	0.47	0.49	0.25
Annual Costs																										
Routine O&M	£M	0.00	0.00	0.00	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04
Transmission Use of System Charge	£M	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Balancing Services Use of System Cost	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.01	0.00
Rates	£M	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Insurance	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01
Total Annual Costs	£M	0.00	0.00	0.00	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.07
Depreciation	£M	0.00	0.00	0.00	0.01	0.02	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.10	0.09	0.09	0.08	0.07	0.00	0.00	0.00	0.00	0.00
Profit Before Interest and Tax	£M	0.00	0.00	0.00	-0.01	0.01	0.16	0.17	0.14	0.15	0.15	0.15	0.16	0.18	0.20	0.21	0.22	0.24	0.25	0.27	0.29	0.38	0.39	0.41	0.43	0.18
	£/MW	0	0	-3,832	-11,725	7,211	156,533	166,447	140,899	146,434	151,688	152,848	164,102	175,352	197,445	209,018	217,182	237,279	250,166	271,414	293,352	379,241	394,101	409,497	425,448	184,311
	£/MWh				6.93	37.62	40.00	33.86	35.19	36.45	36.73	39.44	42.14	47.45	50.23	52.19	57.02	60.12	65.23	70.50	91.14	94.71	98.41	102.25	88.59	
Annual Average PBIT	£M	0.20 2004 - 2027																								
	£/MW	196,434 2004 - 2027																								
	£/MWh	56.49 2004 - 2027																								
Interest on Finance	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tax	£M	0.00	0.00	0.00	-0.01	-0.02	-0.08	0.02	0.03	0.04	0.05	0.06	0.06	0.07	0.08	0.08	0.09	0.09	0.10	0.10	0.11	0.11	0.12	0.12	0.13	0.05
Profit After Interest and Tax	£M	0.00	0.00	0.00	0.00	0.03	0.24	0.14	0.11	0.10	0.10	0.10	0.10	0.10	0.12	0.12	0.13	0.14	0.15	0.17	0.19	0.27	0.28	0.29	0.30	0.13
	£/MW	0	0	479	388	25,406	238,794	142,054	110,933	104,878	101,109	96,337	100,026	104,760	117,869	124,202	127,443	142,815	151,090	167,773	185,140	266,412	276,578	287,179	298,212	129,317
	£/MWh				24.42	57.39	34.14	26.66	25.21	24.30	23.15	24.04	25.18	28.33	29.85	30.63	34.32	36.31	40.32	44.49	64.03	66.47	69.02	71.67	62.16	
Annual Average PAIT	£M	0.14 2004 - 2027																								
	£/MW	137,466 2004 - 2027																								
	£/MWh	40.10 2004 - 2027																								
Cash Flow																										
Add Back Depreciation	£M	0.00	0.00	0.00	0.01	0.02	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.10	0.09	0.09	0.08	0.07	0.00	0.00	0.00	0.00	0.00
Add Receipts																										
Loan	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Equity	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Subtract Payments																										
Capex	£M	0.00	0.06	0.12	0.12	1.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Loan Repayments	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total Cash Flow	£M	0.00	-0.06	-0.11	-0.11	-1.03	0.33	0.23	0.20	0.20	0.19	0.19	0.19	0.20	0.21	0.22	0.22	0.23	0.24	0.25	0.26	0.27	0.28	0.29	0.30	0.13
	£/MW	0	-57,474	-114,086	-109,362	-988.22	330,165	233,426	202,304	196,250	192,481	187,708	191,397	196,131	209,240	215,574	222,646	230,355	238,630	247,420	256,688	266,412	276,578	287,179	298,212	129,317
	£/MWh						79.35	56.10	48.62	47.16	46.26	45.11	46.00	47.14	50.29	51.81	53.51	55.36	57.35	59.46	61.69	64.03	66.47	69.02	71.67	62.16
Annual Average Cash Flow	£M	0.14 2004 - 2027																								
	£/MW	137,466 2004 - 2027																								
	£/MWh	7.16 2004 - 2027																								
NPV Project Cashflow	£M	£0.66																								

ANNEX F
Profit/Loss Statements

Profit Statement - 1MW RoR Hydro, Private Developer

Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	
Income																										
Electricity Income	£M	0.00	0.00	0.00	0.00	0.03	0.11	0.12	0.13	0.13	0.13	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.25	0.26	0.14
ROC Income	£M	0.00	0.00	0.00	0.00	0.04	0.16	0.17	0.13	0.14	0.14	0.14	0.15	0.16	0.16	0.17	0.17	0.18	0.18	0.19	0.19	0.20	0.20	0.21	0.11	
CCL Income	£M	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	
Total Income	£M	0.00	0.00	0.00	0.00	0.07	0.29	0.30	0.27	0.28	0.29	0.29	0.30	0.32	0.34	0.35	0.37	0.38	0.39	0.41	0.42	0.44	0.46	0.47	0.49	0.25
Annual Costs																										
Routine O&M	£M	0.00	0.00	0.00	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04
Transmission Use of System Charge	£M	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Balancing Services Use of System Cost	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.01	0.00
Rates	£M	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Insurance	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01
Total Annual Costs	£M	0.00	0.00	0.00	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.07
Depreciation	£M	0.00	0.00	0.00	0.01	0.02	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.10	0.09	0.09	0.08	0.07	0.00	0.00	0.00	0.00	0.00	
Profit Before Interest and Tax	£M	0.00	0.00	0.00	-0.01	0.01	0.16	0.17	0.14	0.15	0.15	0.15	0.16	0.18	0.20	0.21	0.22	0.24	0.25	0.27	0.29	0.38	0.39	0.41	0.43	0.18
	£/MW	0	0	-3.832	-11.725	7.211	156.533	166.447	140.899	146.434	151.688	152.848	164.102	175.352	197.445	209.018	217.182	237.279	250.166	271.414	293.352	379.241	394.101	409.497	425.448	184.311
	£/MWh					6.93	37.62	40.00	33.86	35.19	36.45	36.73	39.44	42.14	47.45	50.23	52.19	57.02	60.12	65.23	70.50	91.14	94.71	98.41	102.25	88.59
Annual Average PBIT	£M	0.20 2004 - 2027																								
	£/MW	196,434 2004 - 2027																								
	£/MWh	56.49 2004 - 2027																								
Interest on Finance	£M	0.00	0.00	0.01	0.01	0.06	0.06	0.06	0.05	0.05	0.04	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tax	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.02	0.03	0.03	0.04	0.05	0.05	0.05	0.06	0.06	0.07	0.07	0.07	0.08	0.08	0.09	0.03
Profit After Interest and Tax	£M	0.00	0.00	-0.01	-0.02	-0.05	0.10	0.11	0.08	0.08	0.08	0.08	0.09	0.10	0.12	0.14	0.14	0.16	0.18	0.20	0.22	0.31	0.32	0.33	0.34	0.15
	£/MW	0	-2.414	-11.363	-24.810	-51.735	95.672	107.955	79.836	80.678	83.504	84.193	93.942	104.352	124.041	135.583	143.915	164.306	177.032	204.335	222.810	305.159	316.375	328.002	340.039	149.481
	£/MWh					-49.73	22.99	25.94	19.19	19.39	20.07	20.23	22.58	25.08	29.81	32.58	34.59	39.49	42.55	49.11	53.55	73.34	76.03	78.83	81.72	71.85
Annual Average PAIT	£M	0.14 2004 - 2027																								
	£/MW	135,454 2004 - 2027																								
	£/MWh	37.58 2004 - 2027																								
Cash Flow																										
Add Back Depreciation	£M	0.00	0.00	0.00	0.01	0.02	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.10	0.09	0.09	0.08	0.07	0.00	0.00	0.00	0.00	0.00	0.00
Add Receipts																										
Loan	£M	0.00	0.04	0.09	0.10	0.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Equity	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subtract Payments																										
Capex	£M	0.00	0.06	0.12	0.12	1.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loan Repayments	£M	0.00	0.00	0.00	0.00	0.03	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.00	0.00	0.00	0.00	0.00
Total Cash Flow	£M	0.00	-0.02	-0.04	-0.04	-0.32	0.12	0.13	0.10	0.10	0.11	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.20	0.22	0.23	0.31	0.32	0.33	0.34	0.15
	£/MW	0	-17.242	-35.519	-36.442	-321.969	119.421	131.704	103.585	104.426	107.252	107.941	117.691	128.100	147.790	159.331	171.495	184.223	196.949	216.359	226.736	305.159	316.375	328.002	340.039	149.481
	£/MWh					-309.51	28.70	31.65	24.89	25.10	25.78	25.94	28.28	30.79	35.52	38.29	41.21	44.27	47.33	52.00	54.49	73.34	76.03	78.83	81.72	71.85
Annual Average Cash Flow	£M	0.14 2004 - 2027																								
	£/MW	135,454 2004 - 2027																								
	£/MWh	28.88 2004 - 2027																								
NPV Project Cashflow	£M	£0.25																								

ANNEX F
Profit/Loss Statements

Profit Statement - 1MW RoR Hydro, Joint Venture Developer

	Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Income																										
Electricity Income	£M	0.00	0.00	0.00	0.00	0.03	0.11	0.12	0.13	0.13	0.13	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.25	0.26	0.14
ROC Income	£M	0.00	0.00	0.00	0.00	0.04	0.16	0.17	0.13	0.14	0.14	0.14	0.15	0.15	0.16	0.16	0.17	0.17	0.18	0.18	0.19	0.19	0.20	0.20	0.21	0.11
CCL Income	£M	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01
Total Income	£M	0.00	0.00	0.00	0.00	0.07	0.29	0.30	0.27	0.28	0.29	0.29	0.30	0.32	0.34	0.35	0.37	0.38	0.39	0.41	0.42	0.44	0.46	0.47	0.49	0.25
Annual Costs																										
Routine O&M	£M	0.00	0.00	0.00	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04
Transmission Use of System Charge	£M	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Balancing Services Use of System Cost	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.01	0.00
Rates	£M	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Insurance	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01
Total Annual Costs	£M	0.00	0.00	0.00	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.07
Depreciation	£M	0.00	0.00	0.00	0.01	0.02	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.10	0.09	0.09	0.08	0.07	0.00	0.00	0.00	0.00	0.00
Profit Before Interest and Tax	£M	0.00	0.00	0.00	-0.01	0.01	0.16	0.17	0.14	0.15	0.15	0.15	0.16	0.18	0.20	0.21	0.22	0.24	0.25	0.27	0.29	0.38	0.39	0.41	0.43	0.18
	£/MW	0	0	-3,832	-11,725	7,211	156,533	166,447	140,899	146,434	151,688	152,848	164,102	175,352	197,445	209,018	217,182	237,279	250,166	271,414	293,352	379,241	394,101	409,497	425,448	184,311
	£/MWh					6.93	37.62	40.00	33.86	35.19	36.45	36.73	39.44	42.14	47.45	50.23	52.19	57.02	60.12	65.23	70.50	91.14	94.71	98.41	102.25	88.59
Annual Average PBIT																										
	£M	0.20 2004 - 2027																								
	£/MW	196,434 2004 - 2027																								
	£/MWh	56.49 2004 - 2027																								
Interest on Finance	£M	0.00	0.00	0.01	0.01	0.06	0.06	0.06	0.05	0.05	0.04	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tax	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.02	0.03	0.03	0.04	0.05	0.05	0.05	0.06	0.06	0.07	0.07	0.07	0.08	0.08	0.09	0.03
Profit After Interest and Tax	£M	0.00	0.00	-0.01	-0.02	-0.05	0.10	0.11	0.08	0.08	0.08	0.08	0.09	0.10	0.12	0.14	0.14	0.16	0.18	0.20	0.22	0.31	0.32	0.33	0.34	0.15
	£/MW	0	-2,414	-11,363	-24,810	-51,735	95,672	107,955	79,836	80,678	83,504	84,193	93,942	104,352	124,041	135,583	143,915	164,306	177,032	204,335	222,810	305,159	316,375	328,002	340,039	149,481
	£/MWh					-49.73	22.99	25.94	19.19	19.39	20.07	20.23	22.58	25.08	29.81	32.58	34.59	39.49	42.55	49.11	53.55	73.34	76.03	78.83	81.72	71.85
Annual Average PAIT																										
	£M	0.14 2004 - 2027																								
	£/MW	135,454 2004 - 2027																								
	£/MWh	37.58 2004 - 2027																								
Cash Flow																										
Add Back Depreciation	£M	0.00	0.00	0.00	0.01	0.02	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.10	0.09	0.09	0.08	0.07	0.00	0.00	0.00	0.00	0.00
Add Receipts																										
Loan	£M	0.00	0.04	0.09	0.10	0.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subtract Payments																										
Capex	£M	0.00	0.06	0.12	0.12	1.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loan Repayments	£M	0.00	0.00	0.00	0.00	0.03	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.00	0.00	0.00	0.00	0.00
Total Cash Flow	£M	0.00	-0.02	-0.04	-0.04	-0.32	0.12	0.13	0.10	0.10	0.11	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.20	0.22	0.23	0.31	0.32	0.33	0.34	0.15
	£/MW	0	-17,242	-35,519	-36,442	-321,969	119,421	131,704	103,585	104,426	107,252	107,941	117,691	128,100	147,790	159,331	171,495	184,223	196,949	216,359	226,736	305,159	316,375	328,002	340,039	149,481
	£/MWh					-309.51	28.70	31.65	24.89	25.10	25.78	25.94	28.28	30.79	35.52	38.29	41.21	44.27	47.33	52.00	54.49	73.34	76.03	78.83	81.72	71.85
Annual Average Cash Flow																										
	£M	0.14 2004 - 2027																								
	£/MW	135,454 2004 - 2027																								
	£/MWh	28.88 2004 - 2027																								
NPV Project Cashflow	£M	£1.15																								

ANNEX F Profit/Loss Statements

Profit Statement - 5MW Tidal, Utility Developer

Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	
Income																										
Electricity Income	£M	0.00	0.00	0.00	0.00	0.08	0.33	0.35	0.38	0.38	0.39	0.38	0.41	0.43	0.49	0.51	0.54	0.56	0.59	0.62	0.65	0.68	0.71	0.74	0.77	0.40
ROC Income	£M	0.00	0.00	0.00	0.00	0.11	0.46	0.47	0.38	0.39	0.40	0.41	0.42	0.43	0.45	0.46	0.47	0.48	0.50	0.51	0.53	0.54	0.56	0.57	0.59	0.30
CCL Income	£M	0.00	0.00	0.00	0.00	0.01	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.03	
Total Income	£M	0.00	0.00	0.00	0.00	0.20	0.83	0.86	0.80	0.82	0.83	0.84	0.88	0.91	0.98	1.02	1.06	1.10	1.14	1.19	1.23	1.28	1.33	1.38	1.43	0.74
Annual Costs																										
Routine O&M	£M	0.00	0.00	0.00	0.00	0.13	0.13	0.14	0.14	0.14	0.15	0.15	0.16	0.16	0.17	0.17	0.18	0.18	0.19	0.19	0.20	0.21	0.21	0.22	0.22	0.11
Transmission Use of System Charge	£M	0.00	0.00	0.00	0.00	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.11	0.11
Balancing Services Use of System Cost	£M	0.00	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.02	-0.01
Rates	£M	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Insurance	£M	0.00	0.00	0.00	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03
Total Annual Costs	£M	0.00	0.00	0.00	0.00	0.22	0.22	0.22	0.23	0.24	0.24	0.25	0.26	0.26	0.27	0.28	0.29	0.29	0.30	0.31	0.32	0.33	0.34	0.35	0.36	0.38
Depreciation	£M	0.00	0.00	0.02	0.06	0.11	0.39	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.54	0.49	0.45	0.17	0.00	0.00	0.00	0.00	0.00
Profit Before Interest and Tax	£M	0.00	0.00	-0.02	-0.06	-0.13	0.23	0.08	0.01	0.02	0.03	0.03	0.06	0.09	0.15	0.18	0.22	0.25	0.30	0.38	0.46	0.78	0.99	1.03	1.07	0.37
	£/MW	0	0	-4.223	-12.922	-25.885	45.378	16.711	1.803	4.397	6.804	6.760	12.690	18.598	30.924	36.979	43.262	49.781	60.767	76.483	92.687	156.077	197.782	205.903	214.325	73.218
	£/MWh			-4.223	-12.922	-25.885	45.378	16.711	1.803	4.397	6.804	6.760	12.690	18.598	30.924	36.979	43.262	49.781	60.767	76.483	92.687	156.077	197.782	205.903	214.325	73.218
Annual Average PBIT	£M	0.27 2004 - 2027																								
	£/MW	54,512 2004 - 2027																								
	£/MWh	26.60 2004 - 2027																								
Interest on Finance	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tax	£M	0.00	0.00	-0.02	-0.07	-0.10	-0.40	-0.30	-0.17	-0.10	0.00	0.06	0.10	0.13	0.17	0.19	0.21	0.22	0.24	0.25	0.27	0.28	0.29	0.31	0.32	0.11
Profit After Interest and Tax	£M	0.00	0.00	0.00	0.00	-0.03	0.62	0.38	0.18	0.12	0.04	-0.03	-0.04	-0.04	-0.01	0.00	0.01	0.03	0.07	0.13	0.20	0.50	0.70	0.72	0.75	0.26
	£/MW	0	0	528	428	-5.831	124.449	76.294	35.699	24.671	7.753	-5.836	-7.410	-7.568	-2.160	-337	2,249	5,454	13,392	26,239	39,687	100,381	139,414	144,858	150,572	51,661
	£/MWh			528	428	-5.831	124.449	76.294	35.699	24.671	7.753	-5.836	-7.410	-7.568	-2.160	-337	2,249	5,454	13,392	26,239	39,687	100,381	139,414	144,858	150,572	51,661
Annual Average PAIT	£M	0.19 2004 - 2027																								
	£/MW	38,108 2004 - 2027																								
	£/MWh	19.08 2004 - 2027																								
Cash Flow																										
Add Back Depreciation	£M	0.00	0.00	0.02	0.06	0.11	0.39	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.54	0.49	0.45	0.17	0.00	0.00	0.00	0.00	0.00
Add Receipts																										
Loan	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Equity	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subtract Payments																										
Capex	£M	0.00	0.32	0.65	0.67	4.19	2.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loan Repayments	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cash Flow	£M	0.00	-0.32	-0.63	-0.60	-4.11	-1.53	0.94	0.74	0.68	0.60	0.53	0.52	0.52	0.55	0.56	0.57	0.59	0.60	0.62	0.65	0.67	0.70	0.72	0.75	0.26
	£/MW	0	-63,345	-125,740	-120,533	-821,571	-305,977	187,856	147,260	136,232	119,315	105,725	104,152	103,993	109,401	111,224	113,810	117,015	120,731	124,878	129,400	134,255	139,414	144,858	150,572	51,661
	£/MWh		-63,345	-125,740	-120,533	-821,571	-305,977	187,856	147,260	136,232	119,315	105,725	104,152	103,993	109,401	111,224	113,810	117,015	120,731	124,878	129,400	134,255	139,414	144,858	150,572	51,661
Annual Average Cash Flow	£M	0.19 2004 - 2027																								
	£/MW	38,108 2004 - 2027																								
	£/MWh	-23.94 2004 - 2027																								
NPV Project Cashflow	£M	-£1.21																								

ANNEX F Profit/Loss Statements

Profit Statement - 5MW Tidal, Private Developer

Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	
Income																										
Electricity Income	£M	0.00	0.00	0.00	0.00	0.08	0.33	0.35	0.38	0.38	0.39	0.38	0.41	0.43	0.49	0.51	0.54	0.56	0.59	0.62	0.65	0.68	0.71	0.74	0.77	0.40
ROC Income	£M	0.00	0.00	0.00	0.00	0.11	0.46	0.47	0.38	0.39	0.40	0.41	0.42	0.43	0.45	0.46	0.47	0.48	0.50	0.51	0.53	0.54	0.56	0.57	0.59	0.30
CCL Income	£M	0.00	0.00	0.00	0.00	0.01	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.03	0.03
Total Income	£M	0.00	0.00	0.00	0.00	0.20	0.83	0.86	0.80	0.82	0.83	0.84	0.88	0.91	0.98	1.02	1.06	1.10	1.14	1.19	1.23	1.28	1.33	1.38	1.43	0.74
Annual Costs																										
Routine O&M	£M	0.00	0.00	0.00	0.00	0.13	0.13	0.14	0.14	0.14	0.15	0.15	0.16	0.16	0.17	0.17	0.18	0.18	0.19	0.19	0.20	0.21	0.21	0.21	0.22	0.22
Transmission Use of System Charge	£M	0.00	0.00	0.00	0.00	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.11	0.11
Balancing Services Use of System Cost	£M	0.00	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.02	-0.01
Rates	£M	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03
Insurance	£M	0.00	0.00	0.00	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03
Total Annual Costs	£M	0.00	0.00	0.00	0.00	0.22	0.22	0.22	0.23	0.24	0.24	0.25	0.26	0.26	0.27	0.28	0.29	0.29	0.30	0.31	0.32	0.33	0.34	0.35	0.36	0.38
Depreciation	£M	0.00	0.00	0.02	0.06	0.11	0.39	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.54	0.49	0.45	0.17	0.00	0.00	0.00	0.00	
Profit Before Interest and Tax	£M	0.00	0.00	-0.02	-0.06	-0.13	0.23	0.08	0.01	0.02	0.03	0.06	0.09	0.15	0.18	0.22	0.25	0.30	0.38	0.46	0.78	0.99	1.03	1.07	0.37	
	£/MWh	0	0	-4.223	-12.922	-25.885	45.378	16.711	1.803	4.397	6.804	6.760	12.690	18.598	30.924	36.979	43.262	49.781	60.767	76.483	92.687	156.077	197.782	205.903	214.325	73.218
	£/MWh					-43.78	19.19	7.07	0.76	1.86	2.88	2.86	5.37	7.86	13.07	15.63	18.29	21.05	25.69	32.34	39.19	65.99	83.62	87.06	90.62	61.91
Annual Average PBIT																										
	£M	0.27 2004 - 2027																								
	£/MW	54,512 2004 - 2027																								
	£/MWh	26.60 2004 - 2027																								
Interest on Finance	£M	0.00	0.00	0.01	0.02	0.05	0.08	0.08	0.08	0.07	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00
Tax	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.05	0.08	0.11	0.13	0.14	0.16	0.18	0.20	0.21	0.23	0.24	0.26	0.28	0.07	0.07
Profit After Interest and Tax	£M	0.00	0.00	-0.03	-0.08	-0.18	0.15	0.00	-0.07	-0.05	-0.03	-0.05	-0.04	-0.03	0.00	0.02	0.04	0.06	0.10	0.17	0.24	0.55	0.74	0.77	0.80	0.30
	£/MW	0	-570	-6,010	-16,049	-36,784	29,089	421	-13,400	-9,720	-6,358	-10,893	-8,836	-6,510	997	4,148	7,821	11,938	20,658	34,178	48,203	110,111	148,816	153,858	159,093	59,175
	£/MWh					-62.21	12.30	0.18	-5.67	-4.11	-2.69	-4.61	-3.74	-2.75	0.42	1.75	3.31	5.05	8.73	14.45	20.38	46.55	62.92	65.05	67.26	50.04
Annual Average PAIT																										
	£M	0.14 2004 - 2027																								
	£/MW	28,057 2004 - 2027																								
	£/MWh	12.98 2004 - 2027																								
Cash Flow																										
Add Back Depreciation	£M	0.00	0.00	0.02	0.06	0.11	0.39	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.54	0.49	0.45	0.17	0.00	0.00	0.00	0.00	0.00
Add Receipts																										
Loan	£M	0.00	0.04	0.09	0.10	0.56	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subtract Payments																										
Capex	£M	0.00	0.32	0.65	0.67	4.19	2.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loan Repayments	£M	0.00	0.00	0.00	0.00	0.00	0.08	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Total Cash Flow	£M	0.00	-0.28	-0.57	-0.59	-3.71	-1.70	0.49	0.42	0.44	0.45	0.43	0.44	0.45	0.49	0.51	0.52	0.55	0.57	0.59	0.62	0.65	0.74	0.77	0.80	0.30
	£/MW	0	-55,744	-114,832	-117,817	-741,115	-340,363	97,503	83,682	87,361	90,723	86,188	88,246	90,572	98,079	101,230	104,902	109,020	113,517	118,338	123,437	129,505	148,816	153,858	159,093	59,175
	£/MWh					-1,253.36	-143.90	41.22	35.38	36.94	38.36	36.44	37.31	38.29	41.47	42.80	44.35	46.09	47.99	50.03	52.19	54.75	62.92	65.05	67.26	50.04
Annual Average Cash Flow																										
	£M	0.14 2004 - 2027																								
	£/MW	28,057 2004 - 2027																								
	£/MWh	-24.21 2004 - 2027																								
NPV Project Cashflow	£M	-£2.53																								

ANNEX F
Profit/Loss Statements

Profit Statement - 5MW Tidal, Joint Venture Developer

Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	
Income																										
Electricity Income	£M	0.00	0.00	0.00	0.00	0.08	0.33	0.35	0.38	0.38	0.39	0.38	0.41	0.43	0.49	0.51	0.54	0.56	0.59	0.62	0.65	0.68	0.71	0.74	0.77	0.40
ROC Income	£M	0.00	0.00	0.00	0.00	0.11	0.46	0.47	0.38	0.39	0.40	0.41	0.42	0.43	0.45	0.46	0.47	0.48	0.50	0.51	0.53	0.54	0.56	0.57	0.59	0.30
CCL Income	£M	0.00	0.00	0.00	0.00	0.01	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.03	
Total Income	£M	0.00	0.00	0.00	0.00	0.20	0.83	0.86	0.80	0.82	0.83	0.84	0.88	0.91	0.98	1.02	1.06	1.10	1.14	1.19	1.23	1.28	1.33	1.38	1.43	0.74
Annual Costs																										
Routine O&M	£M	0.00	0.00	0.00	0.00	0.13	0.13	0.14	0.14	0.14	0.15	0.15	0.16	0.16	0.16	0.17	0.17	0.18	0.18	0.19	0.19	0.20	0.21	0.21	0.22	0.22
Transmission Use of System Charge	£M	0.00	0.00	0.00	0.00	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.11
Balancing Services Use of System Cost	£M	0.00	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.02	-0.01
Rates	£M	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Insurance	£M	0.00	0.00	0.00	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03
Total Annual Costs	£M	0.00	0.00	0.00	0.00	0.22	0.22	0.22	0.23	0.24	0.24	0.25	0.26	0.26	0.27	0.28	0.29	0.29	0.30	0.31	0.32	0.33	0.34	0.35	0.36	0.38
Depreciation	£M	0.00	0.00	0.02	0.06	0.11	0.39	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.54	0.49	0.45	0.17	0.00	0.00	0.00	0.00	
Profit Before Interest and Tax	£M	0.00	0.00	-0.02	-0.06	-0.13	0.23	0.08	0.01	0.02	0.03	0.03	0.06	0.09	0.15	0.18	0.22	0.25	0.30	0.38	0.46	0.78	0.99	1.03	1.07	0.37
	£/MW	0	0	-4,223	-12,922	-25,885	45,378	16,711	1,803	4,397	6,804	6,760	12,690	18,598	30,924	36,979	43,262	49,781	60,767	76,483	92,687	156,077	197,782	205,903	214,325	73,218
	£/MWh					-43.78	19.19	7.07	0.76	1.86	2.88	2.86	5.37	7.86	13.07	15.63	18.29	21.05	25.69	32.34	39.19	65.99	83.62	87.06	90.62	61.91
Annual Average PBIT	£M	0.27	2004 - 2027																							
	£/MW	54,512	2004 - 2027																							
	£/MWh	26.60	2004 - 2027																							
Interest on Finance	£M	0.00	0.00	0.01	0.02	0.05	0.08	0.08	0.08	0.07	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00
Tax	£M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.05	0.08	0.11	0.13	0.14	0.16	0.18	0.20	0.21	0.23	0.24	0.26	0.28	0.07
Profit After Interest and Tax	£M	0.00	0.00	-0.03	-0.08	-0.18	0.15	0.00	-0.07	-0.05	-0.03	-0.05	-0.04	-0.03	0.00	0.02	0.04	0.06	0.10	0.17	0.24	0.55	0.74	0.77	0.80	0.30
	£/MW	0	-570	-6,010	-16,049	-36,784	29,089	421	-13,400	-9,720	-6,358	-10,893	-8,836	-6,510	997	4,148	7,821	11,938	20,658	34,178	48,203	110,111	148,816	153,858	159,093	59,175
	£/MWh					-62.21	12.30	0.18	-5.67	-4.11	-2.69	-4.61	-3.74	-2.75	0.42	1.75	3.31	5.05	8.73	14.45	20.38	46.55	62.92	65.05	67.26	50.04
Annual Average PAIT	£M	0.14	2004 - 2027																							
	£/MW	28,057	2004 - 2027																							
	£/MWh	12.98	2004 - 2027																							
Cash Flow																										
Add Back Depreciation	£M	0.00	0.00	0.02	0.06	0.11	0.39	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.54	0.49	0.45	0.17	0.00	0.00	0.00	0.00	
Add Receipts																										
Loan	£M	0.00	0.04	0.09	0.10	0.56	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Subtract Payments																										
Capex	£M	0.00	0.32	0.65	0.67	4.19	2.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Loan Repayments	£M	0.00	0.00	0.00	0.00	0.00	0.08	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.00	0.00	
Total Cash Flow	£M	0.00	-0.28	-0.57	-0.59	-3.71	-1.70	0.49	0.42	0.44	0.45	0.43	0.44	0.45	0.49	0.51	0.52	0.55	0.57	0.59	0.62	0.65	0.74	0.77	0.80	0.30
	£/MW	0	-55,744	-114,832	-117,817	-741,115	-340,363	97,503	83,682	87,361	90,723	86,188	88,246	90,572	98,079	101,230	104,902	109,020	113,517	118,338	123,437	129,505	148,816	153,858	159,093	59,175
	£/MWh					-1,253.36	-143.90	41.22	35.38	36.94	38.36	36.44	37.31	38.29	41.47	42.80	44.35	46.09	47.99	50.03	52.19	54.75	62.92	65.05	67.26	50.04
Annual Average Cash Flow	£M	0.14	2004 - 2027																							
	£/MW	28,057	2004 - 2027																							
	£/MWh	-24.21	2004 - 2027																							
NPV Project Cashflow	£M	-£1.19																								

ANNEX G – DEVELOPMENT STAGES OF AN ONSHORE WIND PROJECT

A typical alternative/renewable energy project will go through a number of common stages, which we have summarised below. The councils will be familiar with the planning phase but may be less familiar with the stages preceding and following this. For the sake of simplicity, the process has been summarised as it would apply to the development of an onshore wind farm of approximately the same size as that modelled in this report (40 MW). Other types of development will also go through broadly similar stages, although there are important differences (for example in the planning process for larger installations over 50 MW or 1 MW for hydro, or the additional consultation involved with offshore projects, for example with other marine industries).

The stages can be described as project development, construction, operation and eventual decommissioning. We have broken the development stage (during which the project interacts with the planning process) down further into three phases. A flow chart outlining the development phases in greater detail is attached below.

The first phase of the development stage is exploratory. This is where a developer may undertake resource mapping to identify areas of interest for wind development. This is then refined by looking at the environmental sensitivities of these areas and other factors that may limit development (such as Ministry of Defence low-flying areas). The end result of this phase is the identification of and contact with landowners, which may lead to the signing of an Option Agreement between the landowner and the developer which allows the developer exclusive rights to develop a project on that land for a given period of time (usually from 6 months to 2 years). The negotiation with a landowner can be expected to take 2-3 months. The developer's costs at this stage are minimal, principally their overheads plus typically £2-5,000 for an option payment to the landowner.

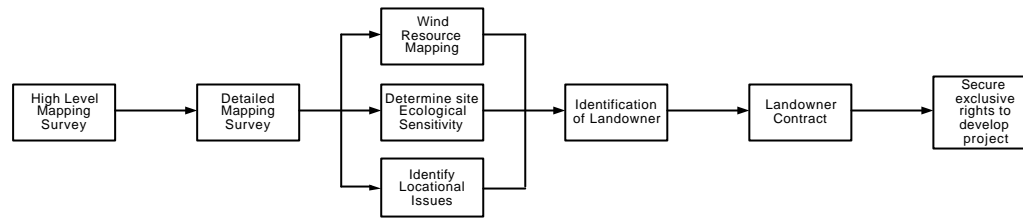
The second phase involves an overview assessment of the site or sites, and consultation with a range of stakeholders. The end result of this stage, for a wind farm development, is an application for planning consents to install anemometry (wind-speed measuring) masts. This stage typically takes 3-6 months and again costs are minimal.

The third phase involves the planning process with which the councils will be familiar. This is the most costly part of the development stage, with £40-80,000 typically being spent on an Environmental Statement produced by independent consultants. The anemometry masts and related equipment, as well as analysis of the data and preparation of plans, consultation and tendering for works packages, all contribute to a total cost for a typical project in the region of £90-200,000, with a further £50,000 if the planning decision is appealed. The preparation of the application for planning consent can take 14-18 months and the determination of planning consent a further 4 months or much longer, depending on appeals.

If the planning phase is successful, the construction stage is typically carried out over a period of 6-12 months. It may involve road works to the site as well as rehabilitation works after the turbines have been installed to remediate any damage caused by the operation of heavy machinery. Construction costs have been detailed in Annex A.

Finally, the operation stage can be expected to last for 20 years or more, and will need to be followed by decommissioning. It is expected that decommissioning costs will be minimal, as it will simply involve the removal of turbines, followed either by re-installation of new turbines or rehabilitation of the land to its original state. This decommissioning stage should take no longer than construction, most likely less than 6 months.

PHASE 1



Time Line



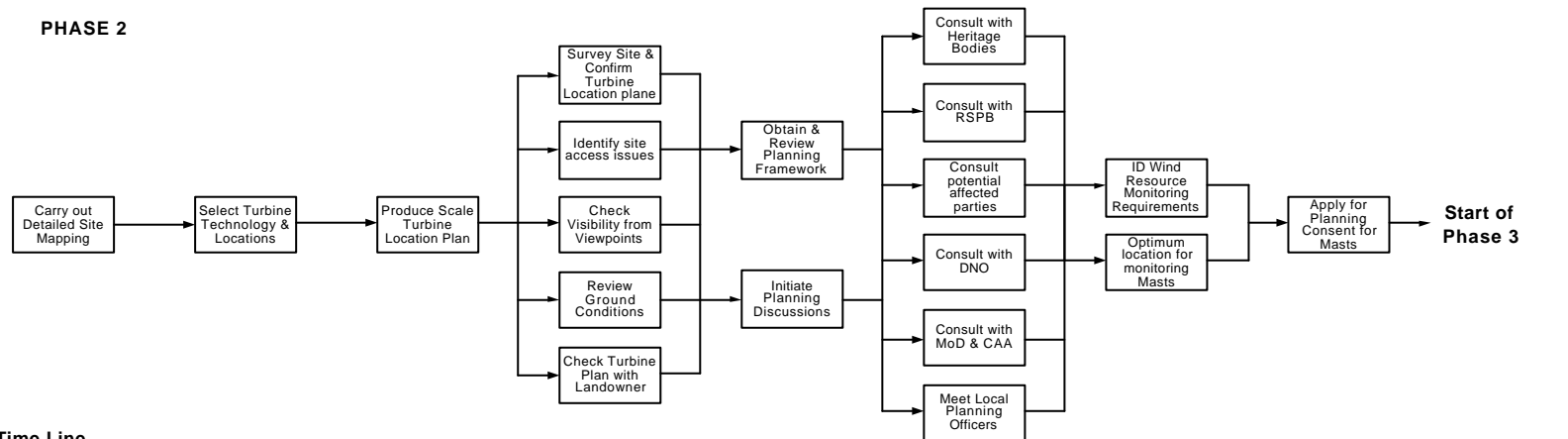
Costs



2-3 months (depending on degree of client negotiation)

Minimal Costs (<£200 third party). If Option payment then £2 - £5K

PHASE 2



Time Line



Costs



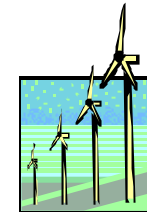
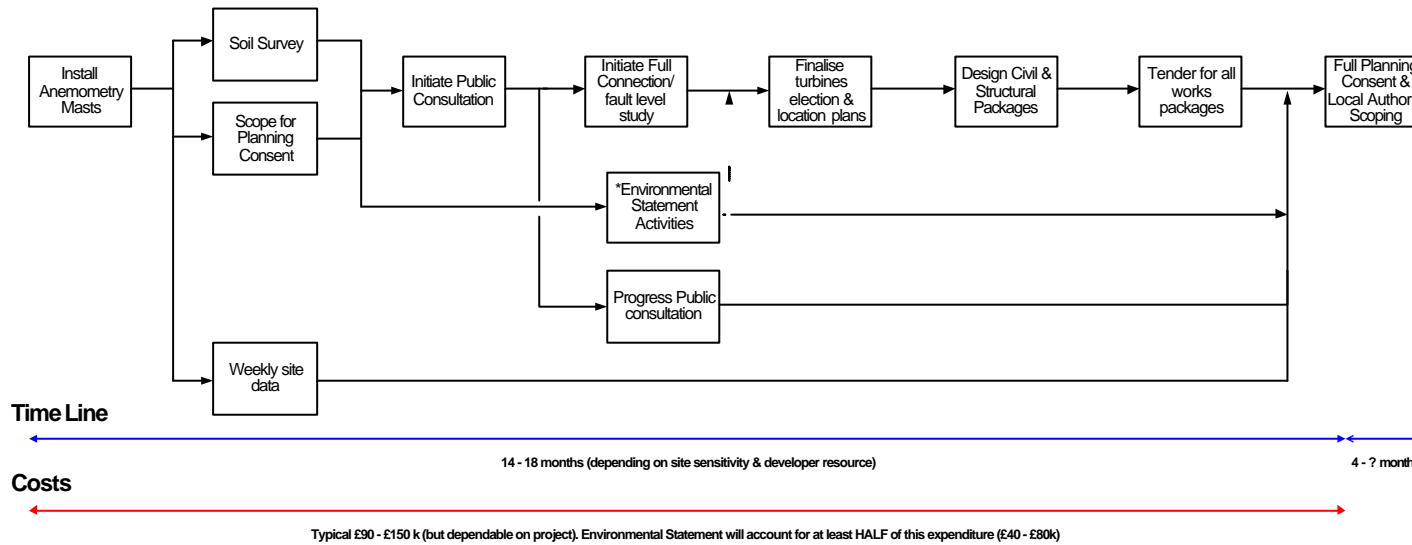
3-6 months

-3 months

Minimal Costs of between £1k - £2K



PHASE 3



*Ground Ecology Surveys & Reports
Ornithological Surveys & Reports
Landscape and Visual Assessment
Noise Surveys and Reports
Television, Radio and Telecoms Statements and Reports
CAA and MoD Statements
Archaeological Studies & Reports

IMPORTANT POINTS

A developer with in-house skills will spend less on third party costs
Generally, the scale of the project will affect costs
Sensitive sites will require more expenditure
Different developers will allocate different 'option costs' to the client

ANNEX H – CORPORATION TAX BANDING

Table H7 below displays the corporation tax bandings.

Table H7: Corporation Tax Banding

Taxable Earnings	Taxable rates
Up to £10,000	0%
Marginal Relief ²³	£10,001 - £50,000
Between £50,001 - £300,000	19%
Marginal Relief ²⁴	£300,001 - £1,500,000
Greater than £1,500,000	30%

²³ The fraction used in calculation of this marginal relief is 19/400

²⁴ The fraction used in the calculation of this marginal relief is 11/400