

The following cases are referred to in this decision:

Kingston Union Assessment Committee v Metropolitan Water Board [1926] AC 331

Great Eastern Railway v Overseers of Haughley (1866) LR 1 EQ 666

Consett Iron Co Ltd v Assess Committee for No.5 or North Western Area of County of Durham
[1931] AC 396

DECISION

Introduction

1. This is an appeal from a decision of the Valuation Tribunal for Wales (the VTW) which altered the assessment in the 2005 non-domestic rating list of the hydro-electric scheme at Dolgarrog Power Station, Conwy, North Wales LL32 8QE (the hereditament) to a rateable value of £720,000. The hereditament had been entered in the compiled rating list for Conwy at £520,000 rateable value at 1 April 2005, but following a proposal made on 11 April 2005 on behalf of RWE NPower Plc (NPower) stating that the RV should be reduced to £1, the Valuation Officer being of the opinion that it was not well founded, referred the matter to the VTW as an appeal by NPower. Following a four day hearing in May and June 2007, and the issuing of an interim decision, which directed the parties to produce revised valuations on the basis of that decision, the VTW's final decision was issued on 28 January 2008 increasing the RV to £720,000 effective from that date. NPower appealed the decision to this Tribunal on 18 March 2008, and the respondent gave notice of intention to appear on 14 May 2008. The appellant now argues for a rateable value of £186,700 and the respondent VO argues for £915,000 (having initially sought £835,000 – see paragraph 21 below).

2. The hereditament, as the parties agree, falls to be valued by the receipts and expenditure method of valuation. Under that method the occupier's net profits are assessed, and from these there is deducted the tenant's share, the amount that the tenant would require to earn to justify taking the tenancy. The remainder is assumed to be available to pay rent and thus becomes the rateable value. An R & E valuation (which is agreed to be the appropriate approach in this appeal) can be extensive and complex. Happily in the present case the parties have agreed all aspects of the valuation except for one element of the hypothetical tenant's income. That element is the income that could be expected to be received from the sale of what are called Renewable Obligation Certificates. ROCs, which we explain more fully below, are tradable certificates that are given in respect of electricity generated from renewable sources. A generator such as the ratepayer is able to sell its ROCs to electricity suppliers to enable them to satisfy their obligation under the Renewables Obligation to purchase from eligible renewable generation a specified proportion of the electricity that they supply. The valuers for both parties are in agreement that the hypothetical land lord and tenant would adopt in their valuations "reasonably conservative best estimates" of the receipts to be expected from sales of ROCs, but they differ as to what those estimates would be. This is the principal issue in the appeal.

3. Mr Guy Roots QC of counsel appeared for the appellant and called Mr Patrick Michael Brennan FRICS Dip Rating, a consultant with Ruddle Merz Ltd, Commercial Property Business Rates Specialists, who gave valuation evidence, and Mr Richard Andrew Slark MSc BA (Hons), a director of Poyry Energy Consulting of Oxford who provided expert opinion on the revenue streams (including income from Renewable Obligation Certificates) that a hypothetical tenant of Dolgarrog Power Station would have expected to earn over the period of a tenancy of 5 years from 1 April 2003.

4. Mr Rupert Warren of counsel appeared for the respondent VO and called Mr Stephen Clive Webb BSc (Hons) MRICS C Dip AF who gave valuation evidence and who, at the relevant date, was a member of the Utilities Rating Team of the Valuation Office Agency responsible for the preparation of rating valuations for power stations in England and Wales, and Mr Michael John McWilliams BSc (Eng) C Eng MICE, Director, Hydropower and Dams with Scott Wilson Ltd, Engineering and Environmental Consultants of Ashford, Kent who gave expert evidence on hydropower generation and revenue.

The hereditament

5. The hereditament is a hydroelectric power station in the centre of Dolgarrog, North Wales. It was originally built in 1907 to provide electricity to an adjacent aluminium works. In 1924 work commenced on the current power station which generates electricity using a natural head of water (the difference in height between the reservoir supplying the water, and the power station below) that feeds into five turbines coupled to generators. A “low head” system was initially introduced in which water is pumped through a pipeline from a reservoir known as Llyn Coedty some 260 metres above the power station into turbines 4 and 5. In 1938, a “high head” system was added which pumps water from the reservoir at Llyn Cowlyd, 350 metres above the power station to turbines 2 and 3. In order to extend the catchment area of the reservoirs there are a series of leats (concrete lined catch-water drains) that intercept run-off water from adjoining areas, together with a tunnel delivering water from Llyn Cowlyd from Llyn Eigau reservoir. These reservoirs are all agreed to be part of the hereditament. The power station also incorporates turbine 1, but that is separately assessed and does not form part of this appeal. By the 1960s the power station was developed to full capacity, and was capable of producing 37 megawatts (MW) of power.

6. In about 2002/03 the appellant made alterations to the two systems so that they would be eligible to receive additional income through the grant of Renewable Energy Certificates (ROCs) (see below). The generating capacity of the low head system was reduced to 14.98 MW, the high head system was reduced to 17.05 MW, and connections between the two systems were removed meaning the systems became entirely independent of each other. This action is accepted as having qualified Dolgarrog as an eligible renewable source under article 8 of the Renewables Obligation Order 2002 (which was in force at the relevant date, but has since been superseded by the 2009 Order) by virtue of it being a hydro-electric generating station with installed capacity of less than 20 MW.

7. In all the hereditament, the subject of this appeal, comprises:

- a. Turbine hall, ancillary stores, offices, control rooms and workshops
- b. Office building and car park
- c. High head pipeline of about 6 km
- d. Low head pipeline of about 2 km
- e. Dams and intake facilities at Llyn Cowlyn and Llyn Coedty

- f. Leats and water transfer tunnel from Llyn Eigau
- g. Rateable plant and machinery.

There is also a large amount of non-rateable plant and machinery installed including turbines, generators, transformers and other electrical switchgear and chattels.

8. There is agreement on the extent of the assets which the law treats as part of the hereditament offered to let by the hypothetical landlord, and which are rateable, and those “tenant’s assets” which are necessary to the operation of the business but are not rateable.

Valuation approach

9. The Antecedent Valuation Date is 1 April 2003 (under paragraph 2(1) of Schedule 6 to the Local Government Finance Act 1988), and the Material Day is 1 April 2005 (under paragraphs 2(6) and 2(7)), and the hereditament is to be valued upon the basis that it was, at the AVD, vacant and to let.

10. As the Welsh Assembly Government has not enacted new regulations to prescribe rateable values for those classes of property that had previously (in connection with the 2000 rating list) been assessed by reference to a statutory formula contained within The Electricity Supply Industry (Rateable Values) (Wales) Order 2000, it was agreed that the normal rules for assessment of rateable values on non-domestic property would apply.

11. The appropriate approach to this valuation was agreed by the parties to be the R & E method, and it was further agreed that the Guidance Note (GN) published in 1997 by the Joint Professional Institutions Rating Valuation Forum provides a helpful guide to the application of this method for the purposes of this appeal. Paragraph 4.1 of the GN recites a passage from *Kingston Union Assessment Committee v Metropolitan Water Board* [1926] AC 331, which summarised the method as it was then applied, and at paragraph 4.2, the GN points out that this description needs to be read in the light of modern practice and the development of the method. That paragraph also sets out the five steps involved in assessing the profit net of expenses which an occupier of the hereditament in question on the terms of the hypothetical tenancy would expect to make in the year of the hypothetical tenancy (referred to as the “divisible balance”), and then deducting the amount which the tenant would require to earn to justify taking the tenancy (referred to as “the tenant’s share”). The remainder is assumed to be available to pay rent.

12. After the appeal had been lodged, and the experts had produced their initial reports and subsequent rebuttal statements, a substantial number of matters were agreed. The result of this was that it was agreed that in terms of valuation, only the first step – the gross receipts to be derived from occupation of the property – was a matter for determination by the Tribunal, and it was only income from ROCs, and the timing of receipt of that income that was in issue.

13. Although the respondent's expert Mr Webb had indicated in his initial report that comparable details of receipts and expenditure and rental evidence from other hereditaments where electricity is generated from renewable sources supported his conclusions, it was confirmed immediately prior to the hearing that he no longer relied upon that evidence.

14. It was agreed that the hypothetical parties would have negotiated the rent on the basis that the likely duration of the tenancy would be five years (consistently with the decision in *Great Eastern Railway v Overseers of Haughley* (1866) LR 1 EQ 666). However, due to the anticipated substantial variations in the divisible balance over that 5 year period commencing 1 April 2003, the valuers calculated what they referred to as an "equivalent constant rent". It was recognised that the rateable value as defined by the LGFA 1988, Schedule 6, paragraph 2(1) is the rent which would have been agreed for one year commencing on 1 April 2003, and that either party could have served notice to terminate the tenancy in order to re-negotiate the rent. As the estimates of both valuers show that, particularly because of the significant variations in ROC receipts, the hypothetical tenant would have made a loss in the first year taken on its own, it was agreed that for the required exercise it was appropriate to smooth the projected 5 years' figures to provide a single annual figure – the equivalent constant rent – which became the rateable value. That approach was said to be consistent with the decision in *Consett Iron Co Ltd v Assessment Committee for No.5 or North Western Area of County of Durham* [1931] AC 396, and also with paragraph 5.10 of the GN.

15. The amount of rates forecast to be payable for the 2003-04 and 2004-05 years is agreed (at a rateable value of £304,300), as is the method of calculating the amount of rates the hypothetical tenant would forecast together with the multiplier, but for the years 2005/06, 2006/07 and 2007/08 the amount payable depends upon the rateable value determined by the Tribunal. The parties' positions as to the effect upon rates payable is summarised thus:

Year	Parties' rates multiplier (agreed)	Ratepayer's estimate of RV	Ratepayer's estimate of rates payable	VO's estimate of RV	VO's estimate of rates payable
		£	£	£	£
2003/04	0.44	304,300	133,892	304,300	133,892
2004/05	0.45	304,300	133,892	304,300	133,892
2005/06	0.40	186,700	74,280	915,000	366,000
2006/07	0.41	186,700	76,137	915,000	375,150
2007/08	0.42	186,700	78,040	915,000	384,529

Renewables Obligation Certificates

16. The Renewables Obligation and provisions as to ROCs are contained in the Renewable Obligation Order 2002, which was made under the Electricity Act 1989 as amended by the Utilities Act 2000. It came into force on 1 April 2002 and would thus have been taken into consideration by the hypothetical tenant when formulating his rental bid at the AVD on 1 April 2003. The RO is to remain in place until 31 March 2027, and it places upon electricity suppliers in England and Wales a legal obligation to purchase a "specified proportion" of the electricity

they supply from eligible renewable generation. The specified proportion was initially set at 3% of supplies for the first obligation year (1 April 2002 to 31 March 2003) rising by annual increments (which at the AVD of 1 April 2003 became 4.3%) to 10.4% for the 2010/2011 obligation period. The obligation levels were designed to facilitate the Government’s target for supplying 10% of electricity from renewable sources by 2010.

17. The RO required suppliers to do one of two things by 1st October following each obligation period:

(a) To produce and issue to accredited generators Renewable Energy Certificates (ROCs) showing that they had obtained the “specified proportion” of the electricity supplied from eligible renewable sources, or

(b) To make a payment calculated as £30 (subject to annual adjustment in accordance with RPI) per megawatt hour of electricity for which ROCs were required but were not submitted (known as the buyout price). The experts agreed that for assessment purposes, the RPI should be forecast to increase by 2.5% per annum, meaning that at the AVD the buyout price was £30.51.

18. Each ROC could be transferred or sold to other suppliers, and the transferred ROC could then be counted by the transferee or buyer towards its own compliance with the RO. In order to support the market thus created in ROCs, their value was not left solely to the market but was divided into two parts: the “buyout” element referred to above, and the “recycle” element.

19. The recycle element varied depending upon the sufficiency of ROCs to meet the total RO specified proportion each year. The effect of any deficit was to increase the value of ROCs and the deficits had to be bought out in cash. The regulator pooled these funds, and then “recycled” them to those suppliers who had submitted ROCs in compliance with the RO. Effectively, the recycle value paid to a supplier would be calculated by reference to what proportion of the ROCs submitted by that supplier constituted of the total ROCs submitted by all suppliers during the relevant period. At the AVD, the hypothetical tenant would have needed to take a view as to the likely value of ROCs throughout the 5 year period, and it was agreed that the assessment would be made on the basis of “a reasonably conservative best estimate”. The parties left it to Tribunal is to determine the meaning of that term.

20. Whilst the buyout price was relatively easy to predict (and has been agreed by the experts in this case) the recycle price would have been more difficult, and it would be necessary to look at a range of information to make that judgement. It is the relevance and reliability of that source information that is in issue between the valuers and the difference between the parties relating to this element is significant, as demonstrated by the following table:

Year of generation	Buyout element £ per ROC (Agreed)	Recycle element £ per ROC – Ratepayer	Recycle element £ per ROC – VO
2003/04	30.51	8.15	25.87

2004/05	31.27	5.63	16.65
2005/06	32.05	1.85	13.80
2006/07	32.86	5.21	23.60
2007/08	33.68	8.51	32.93

21. The experts also disagree as to when the hypothetical tenant would receive the income from the ROCs. The appellant ratepayer considers that the hypothetical tenant would estimate that he will receive the income from the buyout element four months after the ROC has been generated, and the income from the recycling element possibly as late as the December following the compliance year within which the ROC is generated (which runs from 1 April to 31 March) – see paragraph 63 below. In his initial report to this tribunal, Mr McWilliams for the respondent VO said that the hypothetical tenant would forecast that he would receive the income from ROCs produced during the April to September months in the compliance year within which they were generated, and the income from ROCs produced between October and March in the compliance year following. However, in a supplementary note dated 10 December 2012, he revised that opinion, and said that in his view, payment for ROCs (including both the buyout and recycle elements on a pre-sold basis) would be received three months after the month in which the relevant ROCs were generated. The effect of this change of opinion was to increase the rateable value assessment from £835,000 to the £915,000 now sought.

22. It is agreed that a generator would forecast that he would receive 90% of the value of the buyout and recycle elements of an ROC, the balance being attributable to associated costs such as commission were they to be traded at auction and third-party fees. The following schedule sets out the parties' positions as to total ROC income that the hypothetical tenant would estimate he would receive, and the amount of income receivable in each year:

Compliance year	Agreed estimated ROC buyout income relating to year of generation	Ratepayer's estimated ROC Recycling income relating to year of generation	VO's estimated ROC Recycling income relating to year of generation	Ratepayer's estimated total ROC income receivable in year	VO's estimated total ROC income receivable in year
2003/04	£1,664,015	£444,292	£1,410,950	£875,942	£1,982,744
2004/05	£1,705,466	£307,011	£908,091	£2,130,127	£2,777,448
2005/06	£1,748,007	£100,816	£752,652	£2,034,870	£2,540,760
2006/07	£1,792,184	£284,325	£1,287,144	£1,872,078	£2,873,786

2007/08	£1,836,907	£464,088	£1,796,002	£2,100,051	£3,436,279
2008/09				£1,334,043	£1,290,402

The evidence – ROC values

23. Mr Slark is a director of Poyry Energy Consulting (formerly known as ILEX Energy Consulting) which provides strategic, commercial, regulatory and policy advice to European and worldwide energy markets. He is responsible for Poyry’s Renewables Consultancy and is an expert in the provision of investment advice to renewable energy generators in the UK and in respect of forecasting future revenue streams and prices available for renewable generation. His role includes advising on options for trading in the energy and renewable markets and the assessment of the value of ROCs and embedded benefits.

24. Mr Slark said that since 2001 he had been the editor and co-author of the ILEX Energy Report entitled “The Value of Renewable Electricity in the UK”, a bi-annual publication that has been available by subscription to energy providers and renewables developers, acquirers of power stations since 2002. That was, he said, the market leading source of projections for the future value of renewable generation in the UK and in respect of his evidence, he had to a large extent relied upon the October 2002 edition. Although this report was new (as was the RO), ILEX has been producing annual reports on the electricity market since 1994. Mr Slark said that in his opinion had a prospective tenant been considering Dolgarrog power station in April 2003, it is highly likely that it would have purchased and relied upon the forecasts in the renewables report, or commissioned an updated version from ILEX at that date. The credibility of ILEX’s ROC price projections was demonstrated by their success. They were relied upon by developers and financiers of power stations in the UK and in 2010 Poyry earned over £1 million from the sale of its ILEX projections for the value of renewable electricity to over 30 companies.

25. In assessing the value of ROCs (along with the other income streams including Climate Change Levy Exemption Certificates (LECs), TRIADS, BSUoS and other “embedded benefits” where the projected revenue has been agreed between the parties), Mr Slark said that at the relevant date there was considerable price uncertainty of future values of electricity generated from renewable sources (including, but not exclusively, hydro) as values were (and continue to be) determined by a combination of competitive market pressures, and regulatory and policy mechanisms. As it was not possible to define definitive values the market (including the hypothetical tenant) would be most likely to rely upon one of the three price projections from ILEX, described as the “ILEX High, Central or Low scenarios”. Although in his initial report Mr Slark had adopted the ILEX Low scenario, which would have been adopted as a “downside case” by lenders to ensure the project would remain viable under a reasonable range of future outcomes, he said in cross-examination that he was happy to accept that the forecast figures within the ILEX Central scenario that Mr Brennan had used as an input into his valuation would

reflect a hypothetical tenant's "reasonably conservative best estimate" of future income from ROCs.

26. The fundamental driver, Mr Slark said, for ROC values, and year to year variations, was the pace of development of new renewable projects. To understand this driver, ILEX's ROC price modelling methodology was based upon a bottom-up analysis of expected generation levels. A database of over 1,000 projects had been built up from information and evidence from generators and suppliers of electricity and from OFGEN. Assessments were then made of the probabilities and timings of schemes going forward such as when and if they would come on stream. This was compared to the annual obligation in order to determine the volume of any shortfall in ROCs against the target – and from this, the expected ROC price. The electricity market was described as being in a state of turmoil at the AVD and the assessment of future ROC values (apart from the buyout element) was particularly difficult to forecast. This was further complicated by the fact that there was a separate renewables obligation for Scotland with a separate buyout fund which could lead to different values for ROCs redeemed there from those in England and Wales, especially as Scottish ROCs could be traded in England and Wales and vice versa. However, in 2004/05 the separate national funds were merged, but that would not have been known at the AVD. Also to be considered was the fact that the outturn for the 2002/03 compliance period would not be known before November 2003, and with it being such a new and untested system, the results were extremely difficult to predict.

27. It was necessary, in making value judgements for the relevant 5 year period, for the compiler to assess the size of the obligation as a proportion of the supplied volume in respect of Dolgarrog (which would be known at the AVD) and the overall volume of electricity supplied throughout the UK (which would not be known). The number of ROCs expected to be redeemed would be driven by the capacity of eligible generation both at the AVD and predicted for the future years, the volume of production from each eligible generator, the volume of unredeemed ROCs brought forward from previous compliance years, and the volume of those that might be carried forward to the next period. There were further uncertainties, a particular one of which was the volume of biomass co-firing in conventional coal fired power stations. Because of the ease with which existing plant could be converted and the relatively small capital investment required, there was, as Mr McWilliams had acknowledged in his report, the chance that the market could be flooded with ROCs causing a sudden fall in values. Nevertheless, it was acknowledged that there was a restriction on the proportion of ROCs that could be derived from co-firing (to 25% of production) and there was no risk therefore of wholesale conversion of coal fired power stations to biomass units, but it was accepted in cross-examination that as set out in a white paper, there were plans to increase the permitted co-firing above 25%, although whether or not that would actually be the case would not have been known at the AVD.

28. For all of these reasons, Mr Slark said, it was clear that the hypothetical tenant would have had very little to work on in the prediction of this particular strand of income, and he would therefore have been most likely to turn to what he described as the acknowledged specialists in the field: ILEX. He said that ILEX's subscription clients (about eight at the AVD, but subsequently increased to over 30 by 2010) particularly valued this single source for credible

and well researched projections, which allowed them to make reliable income stream forecasts on a comparable and internally consistent basis.

29. Under the ILEX Central scenario, the October 2002 ROC price predictions (set out in Table 8 of Mr Slark’s main report (bundle p 367)) would have produced the following gross values, expressed in £/MWH:

Year	Buy-out price	Recycle buy-out fund	Total
2003/04	30.5	8.1	38.7
2004/05	30.5	5.5	33.3
2005/06	30.5	1.8	32.3
2006/07	30.5	4.8	35.4
2007/08	30.5	7.7	38.2

Mr Slark stressed that whilst, due to the considerable market uncertainty, the newness of the scheme and the key question marks over the co-firing elements, not only was it extremely difficult to predict ROC prices for 2003/04, but the difficulty became significantly more pronounced over the longer term required to be considered in this exercise. He also said in his rebuttal report that contrary to Mr McWilliams’s assertion that the ILEX report “does not attempt to forecast ROC prices”, the ILEX projections were developed precisely for that purpose. What investors wanted were projections of revenues that took a view of the market that coincided with investors’ and financiers’ appetite for risk, and in his view the projections provided the reasonably conservative view that was required. Asked in cross-examination about those projections, Mr Slark accepted that there was no hard evidence available at the AVD on which such predictions could be made, and said that all that could be done was to “take a view” as to how the market would develop, hence what he described as “a plausible range of possibilities” as set out across the low, medium and high scenarios

30. In his view, whilst the “Renewable Obligation Certificate Price Marker”, produced by Platts and the Renewable Power Association (referred to as the Platts Marker) and relied upon by Mr McWilliams for the VO, used the same fundamental approaches in modelling future ROC prices, the ILEX assumptions and methodology were altogether more transparent and justifiable. The Platt’s Marker was a price marker published periodically in *Power UK* (the energy market’s trade journal) and in the January 2003 edition the ROC forecast prices were higher than the equivalent ILEX projections, and Mr Slark said that he had identified a number of inaccuracies in Platts that made its value questionable. The approach was altogether less sophisticated, and there was a bias towards understatement of forecast renewable generation which resulted in higher ROC values. For example, for its October 2002 report ILEX undertook its own research into the potential for co-firing under the restrictions imposed by the RO, including in-house analysis on returns for co-firing investments, a review of biomass fuel

costs and commissioning a report from Ove Arup on conversion costs, and the results took up 18 pages (out of the 29 dedicated to ROCs) of that report. The Platts Marker was on the other hand very conservative in its assumptions on co-firing which was, in fact, emerging as a significant source of ROCs at that time. They also predicted that co-firing was likely to cease in 2006, whereas ILEX predicted that it would continue after then using energy crops and that biomass material previously co-fired in dedicated biomass plants.

31. The effect of co-firing was the principal difference between the appellant's ROC values, and those promulgated by the VO. In his rebuttal statement, Mr Slark said that the lack of a detailed breakdown of assumed generation levels in the Platts Marker prevented a thorough analysis of the differences between the forecasts and thus created difficulties in explaining the differences between them. He went on, at paragraph 38:

“ 38. An example of the lack of clarity in the Platts assumptions can be seen from their treatment of co-firing ROCs. Mr McWilliams states in paragraph C. 18 of the [Platts Marker]:

‘...that it specifically takes account of the bio-mass co-firing rules introduced by the Renewables Obligation Order 2002 and the progress being achieved by major coal-fired power stations in co-firing biomass with coal’.

39. However, the extent to which the [Platts Marker] took account of current and future co-firing cannot be reliably assessed from the information published by Platts. Platts only published a volume for the total shortfall in ROCs. For example, in the 2003/04 compliance period Platts predicted a shortfall of 7.38 million ROCs, which by inference against DTI's anticipated obligation of 13.5 million suggests a total ROC generation volume of 6.12 million in their Medium Build scenario.

40. This is in contrast to ILEX's October [2002] report which projected generation of 10.73 million ROCs in the central Scenario. It should be noted that the co-firing cap (which limited the redemption of co-fired ROCs to 25% of the Obligation) would have permitted 3.75 million co-fired ROCs to be redeemed, whilst ILEX projected a smaller volume of 2.02 million co-fired ROCs to be generated, based on its detailed analysis. We cannot know from the published information how many co-firing ROCs Platts expected to be generated, but it is clear from the large discrepancy between the ILEX and the Platts total generation numbers that it is likely to be substantially lower than the ILEX view. In my view, the Platt's data understates the price risk that substantial co-firing presented at the AVD.”

32. Mr Slark also said that due to the lack of transparency and background information in the Platts Marker, he was unable to reproduce their forecasts from the information produced, and in his opinion the Marker would not have provided an investor or hypothetical tenant with the comfort he required. Indeed, he said, he was unaware of any investment decisions being made in reliance upon the Platts Marker.

33. Whilst Mr Slark agreed with Mr McWilliams that both ILEX and Platts predicted a shortfall in ROCs over the period in question, it was the extent of those shortfalls that was in question (and the effect that would have on prices) and again it was the ILEX predictions that should be preferred. He referred to paragraph 3.52 of the ILEX report – which it was suggested had been misread by Mr McWilliams – illustrating the profile of the RO over the period to 2010/11 which had been set out in the consultation document. The profile suggested a vast increase in generation from qualifying sources between 2001/02 and 2002/03. ILEX estimated the current (October 2002) eligible generation to be just over 5TWH (an energy rather than a power figure). However, under the RO this was required to rise to over 9 TWH by 2002/03, and about 33 TWH by 2010/11. As the RO only came into effect on 1 April 2002, it was evident that there was likely to be a significant shortfall in the initial years which would lead to the value of ROCs rising above the buyout price, as suppliers' buyout payments were recycled to suppliers redeeming ROCs. In cross-examination, Mr Slark explained that the 5 TWH figure was an estimate of the current position in October 2002 when the report was compiled, and was not a forecast. This could not be compared directly with the target of 9.4 TWH for the year to 31 March 2003, and there was no need for Mr McWilliams to speculate on what the ILEX projections were for ROC prices in the 2002/03 compliance period, as these were set out at Table 18 in the report and showed, in the ILEX Central scenario, a figure of £40.25.

34. Mr Slark noted the table that Mr McWilliams had produced as figure 4-1 in his rebuttal report, showing a comparison of the various ROC projections over the relevant period, but he said that this was misleading as it did not allow for smoothing over the 5 year period, and also the use of the Centre for Economics and Business Research (CEBR) projection was inappropriate as it was, by the AVD, obsolete because it took no account of the impact on ROC prices of co-firing (as accepted by Mr McWilliams). There was also no justification for starting the growth rate lines at £55, which greatly exceeded Platt's own forecasts and the auction price. Mr Slark produced an alternative table where the growth rates started from £47 (which was in line with the auction results) and this, he said, sought to present all the evidence on the same basis. The approach had little to do with values other than to indicate the most appropriate methodology. This alternative table incorporated Mr Slark's interpretation of Mr McWilliams' projections based upon the growth rate required to meet the 2010/11 target in full, and at 50%.

35. Turning to Mr McWilliams's initial reliance upon closed auctions of ROCs, Mr Slark said that the only route to market for ROCs available to a hypothetical tenant at the AVD would have been by setting up a bi-lateral trade agreement. Dolgarrog could not use the auctions at that time, and this was accepted by Mr McWilliams in a supplementary note of 10 December 2011, where he also agreed that where, as here, this was not an integrated utility (combined generator and supplier), a bi-lateral trading arrangement with a supplier (with the tenant getting 90% of the ROC value) would be appropriate. Mr Slark said that fixed price bi-lateral agreements were unusual, and would be unlikely to be adopted. He said that his information regarding bi-lateral agreements and the way they operated was built up from discussions with generators and from negotiations on their behalf, together with information from funders and financiers.

36. Mr Slark explained in paragraphs 14-23 of his rebuttal report the two types of closed auctions that existed: the NFPA “bundled” auctions which included matters other than ROCs, and NFPAS (Scottish) auctions that were ROCs only. Not only were the NFPAS auctions not available to Dolgarrog, but the numbers of ROCs sold in the October 2002 and January 2003 auctions were only a very small proportion (less than 3%) of the total ROCs available for trading in the 2002/03 compliance year. The prices achieved (£47.12/MWH in October 2002 and £47.46/MWH in January 2003) were, he thought, the gross figures before commission and other costs and were not a reliable indicator of future ROC values because they only related to ROCs previously issued and they could, at best, only be taken to reflect purchasers’ views of likely eligible generation in that year. A view had to be taken on the NFPA auction that took place on 3-7 February 2003 which sold forward ROCs anticipated generation for just the first six months of the first of the five years with which this appeal is concerned, as the results were not transparent, but the results appeared to imply an ROC value of less than £48/MWH. Paragraph 3.43 of the October 2002 ILEX report suggested that following the first 3 auctions, successful suppliers would have valued ROCs at between £45 and £49/MWH. Mr Slark accepted in cross-examination that his projections for 2003/04 were materially out of line with the auction results.

37. Regarding the National Grid Company (NGC) 7 year statement produced in April 2003 from data and results available at 10 December 2002, and referred to by Mr Mc Williams, Mr Slark said in cross-examination that this would not have been regarded as expressing an authoritative view in respect of generation from renewable sources, and was not intended to, nor did it, express a view on ROC prices. It did, however, foresee a shortfall in generation. It was submitted that there was no explanation in the document as to what steps National Grid (which at that time did not cover Scotland from whence a significant amount of generation came) had taken to predict the amount of eligible generation likely to come on stream, and indeed it was apparent that assumptions had been made in respect of their forecasts for demand and electricity requirements. It would not be possible, therefore, for a prospective hypothetical tenant to satisfy himself that those forecasts were derived from a careful assessment of what might come on stream in future years, and it was also notable that there was no evidence that account had been taken of co-firing in existing power stations.

38. Mr Mc Williams is a civil engineer with wide international experience in the fields of power, water resources and renewable energy. His particular areas of expertise include hydropower planning and engineering, power system planning, economic and financial analyses, and feasibility and investment studies of hydropower schemes. He said that he had a good understanding of the ROC processes and referred in his evidence to the joint cebr/Knight Piesold report for Summerleaze Regeneration published by his firm in October 2002 which, amongst other issues, included an examination of the pattern of electricity generation likely to emerge from existing incentives and recommendations on the evolution of policy to achieve the government’s renewable energy objectives. However, he accepted that he had not been the author of sections relating to ROCs, and was unable to answer a question from the Tribunal concerning the implied ROC price in one of the tables. He said in his rebuttal report and cross-examination that that report was not being relied upon in support of his evidence, other than in respect of the fact that it would have been available to the market and the hypothetical tenant due to it having been presented at an RPA Renewables Conference on 23 October 2002, as the

reference to ROCs was not presented as a short term prices forecast, but rather than as an input value to an economic analysis.

39. In his report Mr McWilliams said that he would expect ROCs to be awarded to the hypothetical tenant (who he agreed would be most likely to be an independent generator) for the full electricity output from Dolgarrog (some 59,000 MWh per annum), it having been converted to comply with the RO. Not being a supplier under the meaning of the 2002 Renewable Obligations Order, the tenant would be able, and would be likely to, sell all of the ROCs it received. As they can be traded independently, the value of these needed to be calculated separately from all the other revenue sources. He said that he coined the phrase “reasonably conservative best estimate” in the assessment of the value of ROCs for the relevant 5 year lease period. The reasonably conservative best estimate, he said, was similar to the approach he used when advising equity investors who tended to be prepared to accept more risk than, for instance, lenders and financiers, who had to consider additional downsides, including planning and other development risks, although he accepted that the developer/investor would of course be looking at a much longer term. In his view, the hypothetical tenant would have a similar appetite for risk to that of an equity investor, and if, as Mr Slark had done in his initial report, the hypothetical tenant had adopted the least risky “Low” scenario which reflected all likely downsides and would be the approach adopted by a lender, the rental bid would be likely to be unsuccessful. He said that in his experience of hydropower development he had not been aware of any project that would be financially viable if all downside scenarios were adopted simultaneously, hence his adoption of the Platt’s “Medium” or “Central Case” Marker as the most reliable source for the required forecasts as it gives projections for six years ahead.

40. Regarding the recycle price (the buyout proportion having been agreed) Mr McWilliams said that in the 2002/03 obligation year 4,552,524 ROCs were submitted in England and Wales against an obligation of 8,393,972. The total paid into the buyout fund was £79,251,930 which, when divided among the ROCs submitted gave a recycle income of £15.94 per ROC (*source: OFGEM Annual Report on the RO February 2004*). This, when added to the agreed buyout price of £30.51 gave a total value per ROC for that year of £46.45. This was within a whisker of the prediction given in the Platt’s Marker at £47, and significantly above the ILEX figure argued for by Mr Slark.

41. Mr McWilliams said that the value of the recycle element was determined by the ability for enough renewable generation to be developed to match the RO. At the AVD there was a general consensus that, at least in the early years, there would be insufficient qualifying generation to meet the RO and therefore the value of ROCs would be higher than the buyout price. This was confirmed in the NGC 7 Year Statement in March 2003 which forecast that renewable generation would amount to “little more than half the rate required to meet the 2010 target”, and it went on to say “The current market price of ROCs alone is about 4.7p/kWh [£47.00/MWh] reflecting the shortage of renewable generation projects against the targets set under the RO.”

42. At the two NFPA auctions conducted before the AVD, buyers were prepared to pay just over £47 per ROC at each. Bearing in mind buyers’ risk and the time-value of money,

Mr McWilliams said that this equated to perhaps £52 to £53 per ROC. He referred to ILEX's analysis of the first four NFPA auctions in its October 2002 report where it said:

“3.43 A rough comparison of the first auction in which there would have been no ROC element and the third, in which there would have been full ROC valuation, suggests that successful suppliers valued the ROC at between £45 and £49/MWh.

3.44 The fourth auction round was the first to take place after the implementation of the Obligation. Average prices achieved for qualifying technologies were slightly higher than in the fourth round, except for biomass where lower prices reflect the partial qualification for ROCs of some of the output auctioned.”

Hence it appeared their view was that ROC values at the time were a little over £49. It was accepted that at the AVD ROCs could not be traded by auction in England and Wales, but this changed in 2006. Thus the methodology for trading ROCs changed at that time.

43. Mr McWilliams also said that paragraph 3.52 of ILEX's October 2002 report “estimates current eligible generation to be just over 5 TWh” and that the target for the end of that obligation year was 9.4 TWh. This implied, according to his calculations, compliance of around 55% and, using the ROCs value calculation with a buyout price of £30 per ROC, this equated to a total value of £54.50 per ROC. It was pointed out in the appellant's closing submissions that it appeared that Mr McWilliams had misunderstood that paragraph. The 5 TWh referred to was the position mid-way through the 2002/03 RO year and could not therefore be taken to imply 55% compliance for the whole year. Indeed that part of the report was not even dealing with forecasts and far from suggesting the figure that he had mentioned, the forecasts which were set out as a range of values between £33.55 and £43.97 per ROC was set out in the ILEX report at table 18. This error was explained by Mr Slark (the author of the report) but it seemed that, as set out in the respondent's closing (paragraph 39) that error had not been taken on board.

44. In the light of all the information and evidence he had considered, Mr McWilliams said, he had concluded that the total ROC value at the AVD was in the range £50-£55 and generators would be able to trade them out for £47 or £48 for immediate settlement; that is, trading them out immediately each monthly number of ROCs was known.

45. Turning to the market's perception of future RO compliance, Mr McWilliams said that in his view, the NGC 7 Year Statement on the likely ability of renewables development to catch up with the RO target in future years would be particularly pertinent, and the hypothetical tenant would have given weight its opinions in respect of compliance and ROC prices. He said that he had based his forecast on an overall 50% compliance with the RO, and was of the view that the Platts Marker was a more reliable forecast than ILEX. It was published by two credible and reputable organisations, Platts being a renowned energy consultancy and RPA being one of the leading organisations representing the renewable energy industry. It gave relatively short term forecasts (6 years) which were in line with the period under consideration here and the starting point was reasonably consistent with, although slightly lower than, trading prices reported at the AVD. In the Platts January 2003 forecast, account was taken for the first time of the biomass co-firing rules and the prevailing perception of a growing shortfall of ROCs. Although the

forecast did not take into consideration potential changes to the co-firing rules beyond 2006, as they were not then known about, Mr McWilliams said he thought that any changes that were made would be of limited impact. Reporting the January 2003 Platts Price Marker, Power UK wrote:

“The price of renewable power is set to increase next year [the 2003/04 Obligation year] because of the lack of renewable power projects coming forward and a slippage in the start dates for some other projects.

According to the latest Renewable Obligation Certificate Price Marker produced by Platts and the Renewable Power Association, the price of ROCs is predicted to be around £56 in the next financial year – significantly up from the £53 figure predicted previously by the marker.

Although the price of ROCs for the two following years falls to around £45 it rises again in 2006/07 to around £56 (under the medium build scenario).”

It continued:

“The marker predicts that the price of ROCs is anticipated to rise to as high as £78 by 2007/08 under the marker’s low build scenario. Even if all the projects currently put forward go ahead as planned, the price of ROCs will still reach £55 – well above the anticipated value of £30/MWh.”

46. Mr McWilliams said that the forecast slightly under-estimated the value of ROCs in the early years of the period under consideration and overestimated the value of ROCs in the later years, where it did not take account of the prolongation of co-firing. The under-estimation in 2005/06 was offset by the over-estimation in 2006/07 and 2007/08 and on balance it was his view that the hypothetical tenant would have relied upon these forecasts in projecting his anticipated revenue streams. His view was that the Marker was “reasonably authoritative” although he accepted that the methodology underlying its production was not particularly transparent.

47. On the other hand, Mr McWilliams said, it was his opinion that the ILEX projections, of which the tenant might well have been aware, had not accurately forecast the 2002/03 ROC values (that being accepted by Mr Slark in cross-examination), and was not in line with market expectations of renewables growth rates. For instance, ILEX had seriously overestimated expectations for the level of renewable compliance (in 2005/06 94% compliance was predicted), and the projections for agricultural input and that from wind farms would have been seen by the market to be particularly over optimistic as, at the AVD, it had already been recognised that green projects were in difficulty. The NGC 7 Year Statement dated March 2003 indicated that by 2010 “little more than half” of the capacity needed to meet the RO would have been provided. A knowledgeable hypothetical tenant would suspect from this view from a body respected in the market that the ILEX projections were not right. Furthermore, ILEX did not appear to have been presented as a short term forecast, and in Mr McWilliams’s view it would have been a more suitable information base for long-term investment forecasting, and overall would not have been seen as an appropriate vehicle for estimating income ROC streams over the

relevant 5 year period. The ILEX report was not widely disseminated to the market place at the AVD, whereas the Platts Marker was readily available and widely publicised.

48. It was submitted, in summary, that the hypothetical tenant would have been aware of the existing shortfall of qualifying capacity at the AVD and the market perceptions of how that shortfall would continue. It would be more likely that he would have reached his reasonably conservative best estimate by, inter alia, taking into account a continuing shortfall rather than the adventurous assumptions about capacity growth that he may have found in the ILEX Central scenario. Mr McWilliams's prediction of 50% compliance through the period was altogether more realistic.

49. In cross-examination Mr McWilliams said that whether or not the tenant was to be an integrated or independent utility mattered not in terms of the assessment of ROC values. The only difference would be that, if integrated and having its own RO, he could expect to receive 100% of the ROC value, whereas if independent and needed to trade its ROCs externally through a bi-lateral agreement, it was agreed that he would expect to receive 90% of the value. There would also be an effect upon timing of receipts [see post]. It was possible, he said, that such a bi-lateral contract might be entered into before the tenancy was taken, by which the mechanism for establishing the price would have been established.

Conclusions - ROC price

50. In an R & E valuation the risks attached to the realisation of any element of the tenant's estimated income would fall to be taken into account in determining the tenant's share. It would be taken into account along with other sources of income in making assessments of profit and risk. In the present case, as we have said, the parties have agreed all elements of the valuation other than the amounts referable to the ROCs that should be fed into the estimated receipts for the five years. They have agreed that the receipts from the recycling element of the ROCs should be determined on the basis of a "reasonably conservative best estimate", leaving it to the Tribunal to determine what effect should be given to this term, and we think that it is appropriate for us to proceed on this basis. In doing so, a number of points must in our view be borne in mind.

51. The difference between the parties' estimates of the ROC recycling income is very great. Over the five years in contemplation the ratepayer's estimate is rather over £1.5m, the VO's is over £6m, and the effect of this difference in terms of the rent that the hypothetical tenant is assumed to pay is huge: £185,700 as compared with £835,000 (on a common assumption as to the timing of receipts). Moreover each of these is the outcome of what each expert has put forward as his central estimate, so that they are unlikely to encompass the range of plausible outcomes. It is clear, therefore, that a very significant risk attaches to the hypothetical tenancy by reason of this element of the income that the tenant might expect to receive from his occupation of the hereditament.

52. It is, we think, improbable that the hypothetical tenant would have based his bid on a single estimate of the recycling income. He would have looked at the range of plausible outcomes and would have made a judgement, not simply in terms of the probability of a particular level of income being achieved, but also of the consequences that potential outcomes might have for the finances of his business. Nevertheless what we have to do is to determine a particular recycling income for each year.

53. We do not have to determine simply the “best estimate” of the recycling income but the “reasonably conservative best estimate”, which implies an estimate that deliberately avoids overstatement and one, therefore, which, amid the great uncertainty of the process, may err on the side of understatement.

54. It is also, we think, wholly improbable that the hypothetical tenant would have based its bid solely on the auction results, the Platts marker and the NGC 7 Year Statement, as Mr Warren, basing himself on Mr McWilliams, submitted. Before committing itself to a tenancy and a particular rent the hypothetical tenant would in our view have wished to be as well-informed as possible about the possible levels of recycling income and the factors affecting it, especially as income from ROCs forms such a substantial part of the generator’s overall income. It would have sought expert advice, quite possibly from ILEX, and would have sought to explore the estimates of the amount of renewable generation and to understand what underlay them. Such an approach is not possible for us, however, and in coming to a conclusion on the reasonably conservative best estimate we are confined to the limited data relied on by Mr McWilliams and the ILEX report. We accept that the hypothetical tenant would have obtained a copy of the ILEX report.

55. Mr McWilliams suggested that the hypothetical parties would have attached a great deal of weight to the prices achieved for ROCs at auctions prior to the AVD. Mr Slark disagreed. We accept Mr Slark’s view that the auctions relating to previous compliance years would have been of little assistance, but we think that weight should clearly be attached to the NFPA auction in February 2003, at which forward ROCs were sold for the first six months of 2003-04 at a price that the parties agree was about £47. The recycling element of this was about £17, compared with Mr Slark’s assumption of £8.15 for the whole year, and Mr McWilliams’s [£25.87]. They were closed auctions and the number of ROCs sold was very small, but they were actual transactions and therefore, we think, the best evidence of price for that particular year. Mr McWilliams suggested that the auction price was a net price and that an amount should be added to it to reflect auction costs. There is nothing to substantiate this, however, and we therefore take the price as good evidence of what the hypothetical tenant would have assumed for ROCs for the first half of 2003-04.

56. NGC’s 7 Year Statement [2002-3] included in its base forecast increasing annual amounts for generation from renewables. It noted that the new electricity trading arrangements (NETA) that had commenced in March 2001 had had an adverse impact on renewables by making it difficult for such “inflexible” generation to compete in the new market place. While ROCs would bring rising annual increases in renewable generating capacity, the base forecast showed this to be little more than half the rate required to meet the 2010 target of 10 GW. The

statement noted that new embedded generating capacity, if utilised, effectively had a negative demand on NGC's transmission system, so that the projected growth of 1.6% for annual electricity use as a whole produced a growth of 0.9% per annum in the electricity transmitted through the system. Mr Roots said that it was clear from the Statement that NGC's interest was in the adequacy of the 400kV and 275kV transmission network and in "balancing" the system. He submitted that the consequence of the negative effect of embedded generation on the system was that a conservative forecast by NGC would have under-predicted embedded generation so as to take a cautious view about future demands on the transmission system. This was the reverse of the conservative approach that the hypothetical tenant would adopt. We accept this and we also accept Mr Slark's view, for the reasons that he gave, that the NGC 7 year Statement would not have been regarded as expressing an authoritative view in relation to generation from renewable sources. Therefore, while we have no doubt that the hypothetical tenant would have had regard to the NGC forecast, limited weight only would have been placed on it.

57. The Platts ROC price marker, giving predictions of ROC prices over the next six years was provided as part of the Platts Power UK trade journal. The approach adopted in the formation of its predictions was, it appears, essentially the same as that of ILEX, with an assessment being made from a database of when future generation was likely to come on stream. Mr Slark's view was that the approach of Platts was considerably less sophisticated than that of ILEX and that it had a natural bias towards underestimating future eligible generation. There is no material before us that would enable us to reach a conclusion on this. The lack of a detailed breakdown of the volume of generation assumed by Platts makes it impossible to identify why there was a significant difference between the ILEX and the Platts assessments or to verify the dependability of the prices that Platts put forward. For this reason, we unable to conclude that the hypothetical tenant would have placed the degree of weight upon it that Mr McWilliams did.

58. In contrast with the Platts price marker the basis of the ILEX scenarios was relatively fully explained. As described, it was bottom-up approach, with over 1,000 projects being taken into account. But, as Mr Warren put it, in the light of answers given by Mr Slark, the type of scrutiny and judgement that was applied was relatively coarse, projects being assessed on the basis of the developers' statements about deliverability and then either accepted (high growth), delayed a year (central) or delayed two years (low). We think that the hypothetical tenant, understanding that this was the basis of the ILEX figures, would have been likely to conclude that the estimates of future capacity in the central scenario could well have been significantly too great.

59. In the ILEX report central generation scenario co-firing constituted a significant element in the assumed output for the years 2004, 2005 and 2006 (about 2,000 GWh out of 10,000 GWh in 2004, but rather less in the succeeding years: Figure 18). After 2006, there was predicted to be a sharp drop, because from 2007 75% of the biomass used would have to be from crops grown for the purpose of generating electricity and from 2011 co-firing would cease to be eligible. The ILEX report contained an annex on co-firing, in which the various biomass sources and their potential were discussed, but no justification was given for the assumption that generating stations would find it practicable or economic to go over to co-firing on the substantial scale assumed for, in most cases, a three-year period only. The Platts report of

January 2003 said that it included co-firing in its market assumptions for the first time (not having done so in earlier reports) but that it assumed that co-firing would effectively stop in 2006. The Platts report gives no indication of the base figures used. It appears to us likely that co-firing constituted a major difference between ILEX and Platts. The hypothetical tenant would, we think, have accepted that co-firing would probably be a significant contributor to eligible generation up to 2006, but would have taken the view that ILEX could well have over-estimated it.

60. The conclusion that we have come to is that a reasonably conservative best estimate of the recycle price at the AVD would have taken for the 2003-04 year of generation a figure no higher than the auction results. For the four succeeding years we adopt figures between those based upon the Platts Medium Build rate relied upon by Mr McWilliams and those from the ILEX Central Scenario upon which Mr Slark's figures were based (see table at paragraph 20 above). The figures that we determine to be appropriate are set out thus:

Year of generation	Buyout price	Recycle price	Total ROC price for year of generation
2003/04	£30.51	£16.49	£47.00
2004/05	£31.27	£11.14	£42.41
2005/06	£32.05	£7.82	£39.87
2006/07	£32.86	£14.40	£47.26
2007/08	£33.68	£20.72	£54.40

The evidence – timing of ROC receipts

61. Having initially thought that the tenant of Dolgarrog would dispose of his ROCs through the auction route, Mr McWilliams subsequently accepted that this was not possible at the AVD, and in cross-examination he accepted Mr Slark's summary of the disposal route and mechanism as set out in his report at paragraphs 2.17 and 2.18. Hence it is now common ground that the hypothetical tenant would have expected to sell his ROCs by means of a bi-lateral agreement with an electricity supplier. There remained a dispute as to the terms that any such bi-lateral contract would include, and Mr McWilliams thought that the contract might be entered into before the tenancy commenced, but Mr Slark said that it would be more consistent to assume that the bi-lateral contract would be entered into after the tenancy commenced. However, it was submitted by the appellant that it was unnecessary to decide which view was correct as neither party suggested that the hypothetical tenant would allow for any uncertainty as to whether he would succeed in entering such a contract or that there might be a delay in doing so.

62. We agree that nothing turns on this, and the only issue under this head therefore is whether, as Mr McWilliams suggested, the contract would have been based upon a forward sale of ROCs or whether, as Mr Slark said, the tenant would only receive value once the supplier had been paid.

63. Mr Slark said in his paragraphs 2.17 and 2.18:

“2.17 The Renewable Obligation has a protracted timeline [illustrated in figure 7]. Renewables Obligation compliance periods relate to annual periods running 1 April to 31 March. ROCs are typically issued three months after the generation of electricity to which they relate. At April 2003:

- * ROCs had to be redeemed by suppliers, or buyout payments made, by 30 September following the end of the compliance period, 5-17 months after generation and 2-14 months after the ROC is issued.
- * The buy-fund was redistributed to suppliers in the November following the end of the compliance period, 7-19 months after generation, and 4-16 months after the ROC is issued.

2.18 There is a time value of money cost associated with the value of ROCs, as the supplier does not have to redeem for ROCs until 5 months after the year end, so does not realise the avoided costs of paying the buy-out price until this point. Furthermore, the supplier does not receive the recycling payments from the buyout fund until the end of November following the Renewables Obligation compliance period. Therefore, the full value of a ROC may not be realised until 19 months after it was generated.”

64. Mr Slark then said, at paragraph 3.45:

“3.45 The only mechanism for forward (advance) sale of a ROC is through a bespoke bi-lateral contract. However, it would have been unusual for this to be done on a fixed price basis. It was, and remains, normal business practice to contract for ROCs on a pass-through basis with the generator being paid a proportion [now agreed at 90%] of the out-turn buyout price and ROC recycling once these are known, and/or realised by the offtaker. Generators are typically paid proportions of the:

- * buyout price in the month after the ROC is issued and transferred to the offtaker; and
- * recycling element in the month after he receives this income.”

The cash flows attached to Mr Brennan’s valuation reflect this basis and these timelines.

65. Mr McWilliams said that under the bi-lateral agreement he thought that ROCs from Dolgarrog would be pre-sold under a pricing formula designed to achieve 90% of the forecast total ROC value. At the end of the month in which generation took place, the quantum of the eligible generation would be known, and hence the hypothetical tenant would be in a position to

invoice for the ROCs. The earliest date on which the supplier could reasonably expect payment to be received from its customers would be in line with normal trading terms of say 30 days, ie, within 1 month of the month in which generation took place.

66. The purchaser of ROCs was likely to be a supplier, and hence it would price the cost of its compliance with the RO into the electricity tariff. It would sell electricity as it was generated and would receive payment under the normal business terms set out above. However, Mr McWilliams said that it was likely that the supplier would wish to negotiate a buffer between receipt of revenue from its customers and payment for ROCs, and it would therefore be appropriate to assume that he would negotiate the making of the payment to the generator for the ROCs say 3 months after the month of generation. Thus, for example, payment for ROCs generated in April would be made in July.

67. It was submitted by the appellant that Mr McWilliams seemed to be devising imaginary terms for a bi-lateral contract which would mimic as far as it was possible to do so, the situation that would have prevailed if it had been possible for Dolgarrog to sell ROCs at auction. Having accepted Mr Slark's timeline for the buyout and recycling elements as factually correct, it was difficult to comprehend why a supplier would consider it worthwhile to pay for ROCs any soon than it would either avoid paying the buyout price or receive its share of the recycling fund unless it negotiated a heavy discount to reflect the time value of money and the risk that the forecast recycling fund would turn out to be different.

68. It was submitted on behalf of the VO that ROCs were in short supply at the AVD and suppliers (the likely purchasers) would have much to gain from securing an ROC stream. Paying in advance on an acceptable forecast price, rather than waiting until the final recycle price was known, would therefore be attractive. The supplier could make provision for the bulk of the ROC cost (the buyout price) in its tariff, and the recycle value could be pegged to a price indicator or forecast that left little room for risk.

Conclusions – timing of ROC receipts.

69. Mr McWilliams was unable to confirm any evidence of agreements for the pre-sale of ROCs in the market on the basis that he was putting forward, and we agree with the appellant that such an arrangement would not be seen as attractive to the purchaser. We are satisfied that the hypothetical tenant would expect to budget for payment for ROCs to be made on the basis outlined by Mr Slark, and we determine therefore that the cashflow calculations (incorporating the forecast ROC prices that we have concluded to be appropriate) should be set out in the final valuation in the manner adopted by Mr Brennan.

Valuations

70. Mr Brennan is a chartered surveyor with over 43 years experience in rating valuation. He produced extensive main and rebuttal reports covering a large number of issues that have, prior

to the hearing of this appeal, now been resolved. In connection with ROCs he said that he had considered the reports and rebuttal statements of both Mr Slark and Mr McWilliams. He agreed that the prospective hypothetical tenant would consult industry experts in respect of forecasting both the amount and the timing of receipts from ROCs and was of the view that it would be most likely to consult ILEX due to its and Mr Slark's background and respected position in this market. He said he was aware that the ILEX reports were highly regarded by developers, operators, and their financial backers in 2003 and considered that the hypothetical tenant would adopt, as they did, the ROC price forecasts that were consistent with the ILEX central scenario as the tenant would be prepared to adopt similar "medium" levels of risk. He was also aware of the Platts Marker, which Mr McWilliams said would be relied upon, but he was concerned that it appeared from the his CV and particularly the redacted parts of the Knight Piesold/CEBR report referred to by him that Mr McWilliams did not have any contemporary involvement with ROC value forecasts in 2003, whereas Mr Slark was the author of the ILEX ROC report and had been intimately involved with this aspect of revenue forecasting. The Platts Marker was, in his view not fully and transparently explained, and some of the calculations appeared inconsistent, whereas ILEX was altogether more thorough and comprehensive.

71. There was a question posed as to whether the ILEX figures were predictions. It was pointed out that paragraph 4.66 of the ILEX report said:

"ILEX does not attach probabilities to these projections; the projections solely illustrate ROC values under the described scenarios with the High and Low projections setting the range of plausible ROC values."

Mr Brennan said that he was aware that the Central projection was the "middle of the road" scenario, and that when he had first visited Mr Slark to discuss his report (not having used ILEX in his earlier valuation before the VT) he might have painted too gloomy a picture of the what the hypothetical tenant would do – hence Mr Slark's initial thoughts that the Low scenario would be used. However, Mr Brennan said that he thought that in reality the tenant would adopt the same approach as a developer or financier and rely upon the Central projections. That would be the "reasonably conservative approach" that was required.

72. Mr Brennan then set out in detail the ROC income on a month by month basis on the Central scenario and adopting other agreed factors such as the 2.5% annual rise in the value of the buyout element, and the receipt timings that Mr Slark had opted for. This produced total ROC income over the projected 5 year period of £10,347,111. He applied this figure to the rest of the inputs in revised composite valuation which produced a rateable value of £185,700.

73. Mr Webb's original valuation which, in respect of income from ROCs was based entirely upon the recommendations of Mr McWilliams, produced a rateable value of £835,000. Allowing for Mr McWilliams's revised opinions on timing of receipts as set out in his supplementary note of 10 December 2011, Mr Webb produced a revised valuation set out in precisely the same format as that of Mr Brennan in which the total ROC income over the 5 year hypothetical lease period of £14,901,419, which had been included in his earlier valuation, remained unchanged. However, the adjustments to the timing of receipts, when converted by smoothing to an equivalent constant rent, resulted in the rateable value increasing to £915,000.

74. In the light of the suggestion by the appellant set out in paragraph 10 above, and the fact that in terms of ROC prices we have determined figures that differ from those produced by both of the experts, we accept that it would be appropriate for the valuers to produce a revised composite valuation adopting the ROC prices we have determined (paragraph 60), and the timings adopted by Mr Brennan in accordance with Mr Slark's report (paragraph 69). The valuers are thus asked to lodge an agreed valuation which will determine the rateable value within 21 days of this interim decision. The decision will become final when the valuation has been incorporated, and the question of costs has been resolved.

Effective dates

75. Submissions were addressed to us that dealt with the question of the effective date in the event that we determined that the rateable value should be higher than that determined by the VTW. As our conclusion is that the RV should be reduced, the question does not arise, and we do not, therefore, deal with it.

Dated 13 July 2012

George Bartlett QC, President

P R Francis FRICS

Addendum

76. The parties have now agreed a revised valuation which is set out in detail at Appendix A to this decision. The rateable value is thus confirmed at £508,235 with effect from 1 April 2005.

77. We have also received submissions on costs. The appellant submits that as the figure determined by the Tribunal is substantially lower than both the figure determined by the VTW (£720,000) and the higher sum contended for by the VO before us (£920,000), it should have all of its costs.

78. The VO submits that the appellant's costs submissions are "overly simplistic and therefore misleading". It is pointed out that this was a case where the parties had worked together to agree the majority of issues in what was an extremely complex exercise, and where the Tribunal had been asked to intervene on only two valuation points.

79. On the most significant of these (ROC prices) the Tribunal's decision produced an average price per ROC over the relevant 5 year period (£46.19 pa) that was higher than that applied by the VTW (£44.51 pa). On the other issue (timing of receipts), this had not been a matter expressly dealt with by the VTW, and although the Upper Tribunal's decision was more favourable to the appellant than that applied by the VTW (it being inferred that they had adopted the VO's position) it had a much less significant impact on the rateable value.

80. The VO says that NPower's appeal could not therefore be said to have been successful, and neither party could fairly be described as the "winner". The Upper Tribunal's decision was clearly a compromise position between the parties, and consequently, in all the circumstances, the Tribunal should adopt the discretion described in para 12.2 of the Practice Directions, and make no order as to costs. This was all the more appropriate as the steps that had been taken to narrow the majority of issues should not result in negative costs consequences for the respondent.

81. In exercising its discretion as to costs, under para 12.2 the Tribunal has regard to all the circumstances, including the conduct of the parties, whether a party has succeeded in part of its case (even if they have not been wholly successful) and admissible offers to settle. The general rule (see para 12.3) is that a successful party will receive its costs. The appellant was clearly successful (even though not to the extent sought), and the rateable value that we have determined is substantially less than the VTW's figure and the even higher figure sought by the respondent. There is, in our view, nothing in the circumstances of the appeal to displace the general rule.

82. We therefore determine that the appellant should have its costs, such costs if not agreed to be subject to detailed assessment by the Registrar on the standard basis.

Dated 13 August 2012

George Bartlett QC, President

P R Francis FRICS

**ELECTRICITY GENERATORS
MODEL VALUATION FOR 2005 RATING LIST**

**RA/24/2008
APPENDIX A
UPPER TRIBUNAL (LANDS CHAMBER)
VALUATION**

POWER STATION:	DOLGARROG			
STATION TYPE:	Hydro			
STATION GENERATING CAPACITY:	Total Capacity:	High Head	17.05 MW	Declared Net Capacity per SI 2000 No. 1163
		Low Head	14.98 MW	Declared Net Capacity per SI 2000 No. 1163
			32.03	

FORECAST STATION PERFORMANCE

YEAR ENDING	31 Mar 2004		31 Mar 2005		31 Mar 2006		31 Mar 2007		31 Mar 2008		31 Mar 2009
	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter	
HIGH HEAD											
LOAD FACTOR	16.87%	39.37%	16.87%	39.37%	16.87%	39.37%	16.87%	39.37%	16.87%	39.37%	16.87%
ELECTRICITY OUTPUT (MWh)	12,600	29,400	12,600	29,400	12,600	29,400	12,600	29,400	12,600	29,400	12,600
AVERAGE INCOME £ PER MWh	18.89	25.11	19.75	24.55	21.73	27.00	22.82	28.35	23.96	29.77	29.77
ELECTRICITY SALES INCOME	£237,956	£738,147	£248,892	£721,728	£273,781	£793,900	£287,470	£833,595	£301,844	£875,275	£875,275
IMBALANCE PRICE £ PER MWh	2.82	2.82	2.89	2.89	1.62	1.62	1.66	1.66	1.70	1.70	1.70
IMBALANCE COST	£35,532	£82,908	£36,414	£84,966	£20,412	£47,628	£20,916	£48,804	£21,420	£49,980	£49,980
ADJUSTED INCOME	£202,424	£655,239	£212,478	£636,762	£253,369	£746,272	£266,554	£784,791	£280,424	£825,295	£825,295
LOW HEAD											
OVERALL LOAD FACTOR	7.54%	20.80%	7.54%	20.80%	7.54%	20.80%	7.54%	20.80%	7.54%	20.80%	7.54%
OVERALL ELECTRICITY OUTPUT (MWh)	4,950	13,650	4,950	13,650	4,950	13,650	4,950	13,650	4,950	13,650	4,950
AVERAGE INCOME £ PER MWh	16.74	23.51	17.47	23.24	19.22	25.56	20.18	26.84	21.19	28.18	28.18
ELECTRICITY SALES INCOME	£82,859	£320,930	£86,475	£317,189	£95,122	£348,908	£99,878	£366,353	£104,872	£384,671	£384,671
IMBALANCE PRICE £ PER MWh	2.82	2.82	2.89	2.89	1.62	1.62	1.66	1.66	1.70	1.70	1.70
IMBALANCE COST	£13,959	£38,493	£14,306	£39,449	£8,019	£22,113	£8,217	£22,659	£8,415	£23,205	£23,205
ADJUSTED INCOME	£68,900	£282,437	£72,169	£277,740	£87,103	£326,795	£91,661	£343,694	£96,457	£361,466	£361,466
TOTAL INCOME FROM ELECTRICITY SALES	£271,324	£937,676	£284,647	£914,502	£340,472	£1,073,067	£358,216	£1,128,485	£376,881	£1,186,761	£1,186,761
ROCS BUYOUT £ PER MWh		£30.51	£30.51	£31.27	£31.27	£32.05	£32.05	£32.86	£32.86	£33.68	£33.68
BUYOUT VOLUME MWh		31,900	28,700	31,900	28,700	31,900	28,700	31,900	28,700	31,900	28,700
ROCS BUYOUT INCOME		£973,269	£875,637	£997,513	£897,449	£1,022,395	£919,835	£1,048,234	£943,082	£1,074,392	£966,616
ROCS RECYCLING £ PER MWh				£16.49		£11.14		£7.82		£14.40	£20.72
RECYCLING VOLUME MWh				60,600		60,600		60,600		60,600	60,600
ROCS RECYCLING INCOME				£999,294		£675,084		£473,892		£872,640	£1,255,632
CONTRACT ADJUSTMENT	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
TOTAL INCOME FROM ROCS	£0	£875,942	£788,073	£1,797,126	£807,704	£1,527,731	£827,852	£1,369,913	£848,774	£1,752,329	£2,000,023
OTHER INCOME											
TRIAD				100,463		102,975		105,549		108,188	110,892
BSUOS AVOIDANCE		20,604		21,119		21,647		22,188		22,743	
INCOME		2,105,547		3,905,931		3,873,596		3,812,203		4,295,675	£2,110,916
											0.95346259
											2,012,679
INCOME FOR PURPOSE OF CALCULATING RENT		2,105,547		3,905,931		3,873,596		3,812,203		6,308,354	
STATION OPERATING COSTS											
FIXED COSTS £ per MW		55,557		56,946		58,370		59,829		61,325	
TOTAL FIXED COSTS		1,779,500		1,823,988		1,869,587		1,916,327		1,964,235	
VARIABLE COSTS £ per GWh		59		60		62		63		65	
TOTAL VARIABLE COSTS		3,554		3,643		3,734		3,827		3,923	
NON DOMESTIC RATES		133,892		137,239		203,294		208,376		213,586	
TOTAL OPERATING COSTS		1,916,946		1,964,870		2,076,615		2,128,530		2,181,744	
OPERATING PROFIT		188,601		1,941,060		1,796,981		1,683,673		4,126,610	
TENANT'S SHARE AND DEPRECIATION		1,267,159		1,262,450		1,257,781		1,265,855		1,277,931	
AMOUNT AVAILABLE EACH YEAR TO PAY RENT		-1,078,558		678,610		539,201		417,818		2,848,679	

EQUIVALENT CONSTANT RENT

Rental Calculation based on 5 Year Profile

PV rate	11.725%					
Rent -		1,078,558	678,610	539,201	417,818	2,848,679
PV factor (1/4 in advance)		0.9867104	0.8831599	0.7904765	0.7075198	0.6332690
Present Value (1/4 in advance) -		1,064,224	599,322	426,226	295,614	1,803,980
PV factor (simple)		1.0000000	0.8950548	0.8011231	0.7170491	0.6417983
RENT ADJUSTED TO QUARTERLY IN ADVANCE		508,238				
Say		508,235				