SAA
Scottish Assessors Association

# Revaluation 2023

# Utilities Committee

## Practice Note 2
## Valuation of On-Shore Wind Turbines

### 1.0 Introduction

This Practice Note applies to the valuation of on-shore wind turbines.

### 2.0 Basis of Valuation

2.1 The valuation of wind turbines is a combination of site value (valued on the Comparative Principle of valuation) with foundations, roads, cables, buildings etc being valued using the Contractor's Basis of valuation.

2.2 Turbines should also be valued using the Contractor's Basis of valuation where they are not deemed to be Excepted Plant & Machinery as defined in The Valuation for Rating (Plant and Machinery) (Scotland) Regulations 2000 (as amended).

### 3.0 Entry in Valuation Roll

It is recommended that these subjects be described as Wind Turbine(s).

### 4.0 Site Categorisation

4.1 Wind turbines in Scotland will be accredited by the Office of Gas and Electricity Markets (Ofgem). Prior to undertaking the valuation, it should be confirmed under which regime the valuation subject is accredited.

Each will be classified as either:

- Renewable Obligation Certificates (ROC's)
- Feed In Tariffs (FIT's)
- Contract for Difference (CfD)
- Unaccredited Sites

The valuer will be able to check the type of accreditation by filtering Ofgem's database at the following link:

https://renewablesandchp.ofgem.gov.uk/Public/ReportViewer.aspx?ReportPath=/Renewables/Accreditation/AccreditedStationsExternalPublic&ReportVisibility=1&ReportCategory=1/and.ofggovublortVie.aspx?ReportPath=/Renewlesn/Accred

4.2 It should be noted that some wind turbines are subsidy free. These will sometimes be referred to as Full Merchant or Unaccredited.

## 5.0 Valuation

### 5.1 Site Value

5.1.1 Where the turbine(s) have been in operation for a minimum of 3 years, the megawatt hours (MWhs) adopted should reflect the 3-year average to 31 March 2022 at the location. However, this figure should not be strictly adopted without a careful inspection of the monthly generation data ensuring no lengthy outages which would not reflect the hypothesis. These figures can be ascertained at: http://www.ref.org.uk/energy-data

5.1.2 Where the turbine(s) has been in operation for between 12 and 36 months, the valuer should establish the general level for a calendar year

5.1.3 Where the turbine(s) has been in operation for less than 12 months, the valuer should utilise the estimate of MWhs produced by the P90 certificate which is captured on the Assessor's Information Notice or alternatively can be obtained from the operator.

5.1.4 An appropriate rate/MWh will be applied to the adopted MWh from 5.1.1 to 5.1.3 above to establish the hypothetical gross income achievable at the valuation subjects. The appropriate rate/MWh will be selected from Appendix 1a or Appendix 1b. This rate will be dependent upon the accreditation of the site and in the case of FIT accredited turbines, the generating capacity, and the date of accreditation which can be inspected at the following link: http://www.ref.org.uk/energy-data

5.1.5 In instances where a FIT accredited site is being valued, it should be noted that to correctly state the gross income/MWh, the wholesale electricity price of £65/MWh should be added to the figure from Appendix 1b

5.1.6 Once the hypothetical gross income achievable at the valuation subjects has been established, the appropriate percentage to this figure should be applied to arrive at the net annual value (NAV) for

the land element of the subjects. The appropriate percentages are stated at Appendix 2.

5.2 **Value of Contractor's Elements**

5.2.1 An addition under this heading should be made to represent the value attributable to all of the rateable items on site. This will include supports, foundations, cables, buildings, roads & paths etc., and may include turbines (please refer 2.2 above).

5.2.2 The appropriate capital cost to be applied is shown at Appendix 3. It should be noted that the stated costs at Appendix 3 have been adjusted to represent only the elements which are rateable.

5.2.3 It should be established from return of information forms whether the electricity generated is mainly or exclusively for distribution for sale to consumers. This will determine which cost/MW to adopt at Appendix 3.

5.2.4 Decapitalisation Rate: - the appropriate statutory decapitalisation rate should be applied to the element of value calculated at 5.2.2 above.

5.2.5 Age & Obsolescence

An allowance for functional obsolescence should be applied to the Contractors element of the valuation in accordance with the table at Appendix 4 below.

**Appendix 1a**

| Accreditation Type | Total Installed Generating Capacity (TIGC) | Rate/MWh to be Applied |
|---|---|---|
| | | |
| ROC (eligible for 1 ROC/MWh) | All | £115 |
| ROC (eligible for 0.9 ROC/MWh) | All | £110 |
| Contract for Difference | All | £115 |
| Unaccredited | All | £65 |

| Accreditation From/To | | Minimum Capacity (MW) | Maximum Capacity (MW) | Tariff (£/MWh) |
|---|---|---|---|---|
| 01/04/2010 | 31/03/2012 | 1.51 | 5 | £60 |
| 01/04/2010 | 31/03/2012 | 0.51 | 1.5 | £128 |
| 01/04/2010 | 31/03/2012 | 0.11 | 0.5 | £254 |
| 01/04/2010 | 31/03/2012 | 0.015 | 0.1 | £327 |
| 01/04/2012 | 30/11/2012 | 1.51 | 5 | £60 |
| 01/04/2012 | 30/11/2012 | 0.51 | 1.5 | £128 |
| 01/04/2012 | 30/11/2012 | 0.11 | 0.5 | £254 |
| 01/04/2012 | 30/11/2012 | 0.015 | 0.1 | £313 |
| 01/12/2012 | 31/03/2013 | 1.51 | 5 | £55 |
| 01/12/2012 | 31/03/2013 | 0.51 | 1.5 | £117 |
| 01/12/2012 | 31/03/2013 | 0.11 | 0.5 | £216 |
| 01/12/2012 | 31/03/2013 | 0.015 | 0.1 | £259 |
| 01/04/2013 | 31/03/2014 | 1.51 | 5 | £49 |
| 01/04/2013 | 31/03/2014 | 0.51 | 1.5 | £117 |
| 01/04/2013 | 31/03/2014 | 0.11 | 0.5 | £216 |
| 01/04/2013 | 31/03/2014 | 0.015 | 0.1 | £259 |
| 01/04/2014 | 30/09/2014 | 1.51 | 5 | £39 |
| 01/04/2014 | 30/09/2014 | 0.51 | 1.5 | £93 |
| 01/04/2014 | 30/09/2014 | 0.11 | 0.5 | £172 |
| 01/04/2014 | 30/09/2014 | 0.015 | 0.1 | £207 |
| 01/10/2014 | 31/03/2015 | 1.51 | 5 | £35 |
| 01/10/2014 | 31/03/2015 | 0.51 | 1.5 | £84 |
| 01/10/2014 | 31/03/2015 | 0.11 | 0.5 | £155 |
| 01/10/2014 | 31/03/2015 | 0.015 | 0.1 | £186 |
| 01/04/2015 | 30/09/2015 | 1.51 | 5 | £31 |
| 01/04/2015 | 30/09/2015 | 0.51 | 1.5 | £75 |
| 01/04/2015 | 30/09/2015 | 0.11 | 0.5 | £138 |
| 01/04/2015 | 30/09/2015 | 0.015 | 0.1 | £165 |
| 01/10/2015 | 14/01/2016 | 1.51 | 5 | £28 |
| 01/10/2015 | 14/01/2016 | 0.51 | 1.5 | £67 |
| 01/10/2015 | 14/01/2016 | 0.11 | 0.5 | £124 |
| 01/10/2015 | 14/01/2016 | 0.015 | 0.1 | £157 |
| 15/01/2016 | 31/03/2016 | 1.51 | 5 | £9 |
| 15/01/2016 | 31/03/2016 | 0.11 | 1.5 | £62 |
| 15/01/2016 | 31/03/2016 | 0.051 | 0.1 | £96 |
| 01/04/2016 | 30/06/2016 | 1.51 | 5 | £9 |
| 01/04/2016 | 30/06/2016 | 0.11 | 1.5 | £55 |
| 01/04/2016 | 30/06/2016 | 0.051 | 0.1 | £86 |
| 01/07/2016 | 30/09/2016 | 1.51 | 5 | £9 |

| | | | | |
|---|---|---|---|---|
| 01/07/2016 | 30/09/2016 | 0.11 | 1.5 | £49 |
| 01/07/2016 | 30/09/2016 | 0.051 | 0.1 | £77 |
| 01/10/2016 | 31/12/2016 | 1.51 | 5 | £9 |
| 01/10/2016 | 31/12/2016 | 0.11 | 1.5 | £44 |
| 01/10/2016 | 31/12/2016 | 0.051 | 0.1 | £68 |
| 01/01/2017 | 31/03/2017 | 1.51 | 5 | £9 |
| 01/01/2017 | 31/03/2017 | 0.11 | 1.5 | £38 |
| 01/01/2017 | 31/03/2017 | 0.051 | 0.1 | £59 |
| 01/04/2017 | 30/06/2017 | 1.51 | 5 | £9 |
| 01/04/2017 | 30/06/2017 | 0.11 | 1.5 | £35 |
| 01/04/2017 | 30/06/2017 | 0.051 | 0.1 | £54 |
| 01/07/2017 | 30/09/2017 | 1.51 | 5 | £9 |
| 01/07/2017 | 30/09/2017 | 0.11 | 1.5 | £31 |
| 01/07/2017 | 30/09/2017 | 0.051 | 0.1 | £54 |
| 01/10/2017 | 31/12/2017 | 1.51 | 5 | £8 |
| 01/10/2017 | 31/12/2017 | 0.11 | 1.5 | £28 |
| 01/10/2017 | 31/12/2017 | 0.051 | 0.1 | £54 |
| 01/01/2018 | 31/03/2018 | 1.51 | 5 | £7 |
| 01/01/2018 | 31/03/2018 | 0.11 | 1.5 | £24 |
| 01/01/2018 | 31/03/2018 | 0.051 | 0.1 | £51 |
| 01/04/2018 | 30/06/2018 | 1.51 | 5 | £7 |
| 01/04/2018 | 30/06/2018 | 0.11 | 1.5 | £22 |
| 01/04/2018 | 30/06/2018 | 0.051 | 0.1 | £53 |
| 01/07/2018 | 30/09/2018 | 1.51 | 5 | £6 |
| 01/07/2018 | 30/09/2018 | 0.11 | 1.5 | £20 |
| 01/07/2018 | 30/09/2018 | 0.051 | 0.1 | £52 |
| 01/10/2018 | 31/12/2018 | 1.51 | 5 | £5 |
| 01/10/2018 | 31/12/2018 | 0.11 | 1.5 | £18 |
| 01/10/2018 | 31/12/2018 | 0.051 | 0.1 | £52 |
| 01/01/2019 | 31/03/2020 | 1.51 | 5 | £4 |
| 01/01/2019 | 31/03/2020 | 0.11 | 1.5 | £16 |
| 01/01/2019 | 31/03/2020 | 0.051 | 0.1 | £50 |

**Appendix 2**

| Accreditation Type | Total Installed Generating Capacity (TIGC) | Appropriate Percentage to be Applied |
|---|---|---|
| ROC | All | 5% |
| Contract for Difference | All | 5% |
| Unaccredited | All | 4% |
| FIT | 51kW – 500kW | 7½% |
| FIT | Greater than 501kW | 6% |

**Appendix 3**

| Installed Capacity | Electricity mainly for distribution for sale to consumers (cost/MW) | Electricity NOT mainly for distribution for sale to consumers (cost/MW) |
|---|---|---|
| 50 kW | £1,200,000 | £4,320,000 |
| 75 kW | £950,000 | £3,420,000 |
| 100 kW | £850,000 | £3,060,000 |
| 200 kW | £650,000 | £2,520,000 |
| 500 kW | £650,000 | £2,520,000 |
| 800 kw | £450,000 | £1,620,000 |
| 1.5 MW | £400,000 | £1,440,000 |
| 2 MW | £375,000 | £1,350,000 |
| 3 MW | £350,000 | £1,260,000 |
| 4 MW | £325,000 | £1,117,000 |
| 6 MW | £312,500 | £1,125,000 |
| 10 MW | £300,000 | £1,080,000 |
| 70 MW & over | £250,000 | £900,000 |

*Interpolate between points

**Appendix 4**

| Year | Allw |
|---|---|
| 2023 | 0.0% |
| 2022 | 2.0% |
| 2021 | 4.0% |
| 2020 | 6.0% |
| 2019 | 8.0% |
| 2018 | 10.0% |
| 2017 | 12.0% |
| 2016 | 14.0% |
| 2015 | 16.0% |
| 2014 | 18.0% |
| 2013 | 20.0% |
| 2012 | 22.0% |
| 2011 | 24.0% |
| 2010 | 26.0% |
| 2009 | 28.0% |
| 2008 | 30.0% |
| 2007 | 32.0% |
| 2006 | 34.0% |
| 2005 | 36.0% |
| 2004 | 38.0% |
| 2003 | 40.0% |

| Year | Allw | |
|---|---|---|
| 2002 | 42.0% | |
| 2001 | 44.0% | |
| 2000 | 46.0% | |
| 1999 | 48.0% | |
| 1998 | 50.0% | |
| 1997 | 52.0% | |
| 1996 | 54.0% | |
| 1995 | 56.0% | |
| 1994 | 58.0% | |
| 1993 | 60.0% | max |
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