



# Micro-generation settlement

Decision Paper  
May 2022



## About the Utility Regulator

The Utility Regulator is the independent non-ministerial government department responsible for regulating Northern Ireland's electricity, gas, water and sewerage industries, to promote the short and long-term interests of consumers.

We are not a policy-making department of government, but we make sure that the energy and water utility industries in Northern Ireland are regulated and developed within ministerial policy as set out in our statutory duties.

We are governed by a Board of Directors and are accountable to the Northern Ireland Assembly through financial and annual reporting obligations.

We are based at Queens House in the centre of Belfast. The Chief Executive leads a management team of directors representing each of the key functional areas in the organisation: Corporate Affairs, Markets and Networks. The staff team includes economists, engineers, accountants, utility specialists, legal advisors and administration professionals.



### Our mission

To protect the short- and long-term interests of consumers of electricity, gas and water.



### Our vision

To ensure value and sustainability in energy and water.



### Our values

- Be a best practice regulator: transparent, consistent, proportionate, accountable and targeted.
- Be professional – listening, explaining and acting with integrity.
- Be a collaborative, co-operative and learning team.
- Be motivated and empowered to make a difference.



## Abstract

In line with the Market Registration Code (MRC) Change Control Procedure the Utility Regulator has been asked by the Central Design Authority (CDA) to consider two mutually exclusive options for the methodology for ascribing the generated units to micro-generators for the electricity they generate and export to the Northern Ireland electricity distribution system.

This Decision paper details responses received and the Utility Regulator Board decision made on 17 February 2022 following consultation on 19 March 2021.

## Audience

This document is likely to be of interest to regulated companies in the energy industry, suppliers, government, industry groups, consumer bodies, environmental groups, those with an interest in the energy industry and anyone with installed small scale generation.

## Consumer impact

Changes to market systems may affect how Suppliers have their export units taken into account in their wholesale settlement values. All micro-generators are free to choose not to accept the regulated offering based on their own commercial considerations. Where a generator chooses not to enter into the regulated contract, the amount that they are offered for electricity and associated benefits will depend on the contract that that generator has entered into.



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## Executive Summary

As part of its role in regulating Northern Ireland's electricity industry, the Utility Regulator's functions involves the licensing of electricity suppliers, generators and transmission and distribution companies.

This Decision paper follows the public consultation<sup>1</sup> which focused on proposed changes to the existing arrangements for the methodology for ascribing the generated units to micro-generators for the electricity they generate and export to the Northern Ireland electricity distribution system.

In line with the Market Registration Code (MRC)<sup>2</sup> Change Control Procedure, the Utility Regulator was asked by the Central Design Authority (CDA) to consider two opposing changes to the existing arrangements.

When considering micro-generation this consultation identified the challenges that needed to be addressed if an equitable approach is to be achieved to ensuring those who generate their own renewable electricity, for example from solar panels on their roofs, are assigned the correct level of units when they sell units that are not consumed on the premises into the grid.

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<sup>1</sup> <https://www.uregni.gov.uk/files/uregni/consultations/Micro%20generation%20consultation%20-%20March%202021.pdf>

<sup>2</sup> <https://www.uregni.gov.uk/retail-market-documentation>



# 1. Introduction

## Background

- 1.1. A micro-generator is small-scale plant and equipment used to generate electricity, such as solar panels on the roof of a domestic dwelling. The electricity generated can be used on site with any electricity not used on site exported onto the Northern Ireland electricity distribution system. Micro-generators are able to sell this electricity either directly to a supplier or by using the services of an agent.
- 1.2. In 2015 and in accordance with the procedures set out in the Market Registration Code<sup>3</sup> the Utility Regulator approved a proposed change to the Code which meant that each micro-generator was 'deemed' to have exported a percentage of the installed capacity (times the load-factor) and is known as a 'Deemed Solution'. This was based on the installed capacity that it had registered with Ofgem for the purposes of receiving Renewables Obligations Certificates.
- 1.3. Based on the generation type, a half hour settlement profile<sup>4</sup> is applied to calculate the expected amount of generation per year. A figure of 45% is then applied as this is what, on average, is 'deemed' to be exported to the grid from a premises with a micro-generator. This 45% figure was calculated using the average of a sample of export meter readings provided, at that time, prior to the introduction of the Deemed Solution.
- 1.4. A micro-generator is then able to contract and receive a payment for their exported units either directly with a supplier or through an agent based on this deemed figure.
- 1.5. This short-term interim Deemed Solution was implemented on 31 August 2015.
- 1.6. It is a commercial decision for the supplier whether to buy the exported electricity and seek settlement in the wholesale market. However, Power NI has an obligation to offer terms to micro-generators where asked.
- 1.7. The Utility Regulator has received two Change Requests from the CDA requesting approval for changes to the market systems.

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<sup>3</sup> [https://www.uregni.gov.uk/sites/uregni.gov.uk/files/media-files/20120521\\_MRC\\_Final\\_2.pdf](https://www.uregni.gov.uk/sites/uregni.gov.uk/files/media-files/20120521_MRC_Final_2.pdf)

<sup>4</sup> A load profile in simple terms can be described as an estimate of how much electricity a generator produces over the course of a year. A half-hourly Load profile is produced for each generator type (wind, solar etc.) and can be applied where half-hourly metering is not available to record actual output.



## **Purpose of the March consultation Paper**

- 1.8. The Utility Regulator issued a consultation paper in March 2021 to seek views on the methodology for ascribing the generated units to micro-generators for the electricity they generate and export to the Northern Ireland electricity distribution system. As part of our role in regulating Northern Ireland's electricity industry, our functions involve the licensing of electricity suppliers, generators and transmission and distribution companies.
- 1.9. This public consultation focused on proposed changes to the existing arrangements for the methodology for ascribing the generated units to micro-generators for the electricity they generate and export to the Northern Ireland electricity distribution system. In line with the Market Registration Code (MRC) Change Control Procedure, we have been asked by the Central Design Authority (CDA) to consider two opposing changes to the existing arrangements.
- 1.10. The consultation identified the challenges that need to be addressed if an equitable approach is to be achieved to ensuring those who generate their own renewable electricity, for example from solar panels on their roofs, are assigned the correct level of units when they sell units that are not consumed on the premises into the grid.
- 1.11. In line with the MRC Change Control Procedure, Discussion Requests DR1202 and DR1203 were submitted to the CDA in advance of the CDA meetings on 6 November 2019 and 16 January 2020 respectively. DR1202 was raised by Power NI and DR1203 was raised by Budget Energy.
- 1.12. DR1202 proposed moving away from the Deemed Solution to a system where actual export meter reads are provided by the micro-generator. DR1203 proposed to retain the Deemed Solution, review the deemed profile value of 45% and align the export settlement calendar with the annual NIRO8 Compliance Periods.
- 1.13. Both Discussion requests were accepted as change requests by CDA in line with the Market Registration Code. The Change Requests are mutually exclusive of one another and only one Change Report can be taken forward. One is an update of the existing Deemed Solution whereas the other is a complete move away from the Deemed Solution to the provision of an actual export meter read arrangement.

## **Responses to the March 2021 consultation Paper**

- 1.14. We received 9 responses. 7 of the responses were in favour of DR1202 (actual



read solution) and 2 were in favour of DR1203 (retention of the deemed meter read solution).

For DR1202

- a) NIE Networks
- b) SSE Airtricity
- c) Action Renewables (ARET)
- d) MCS Charitable Foundation
- e) Consumer Council for Northern Ireland (CCNI)
- f) Power NI
- g) Naturgy

For DR1203

- a) Budget Energy
- b) INFRAM LLP

## **Issues raised**

- 1.15. We summarise below some of the points made by respondents. This summary is not intended to be exhaustive of every point made in the responses. However, the Utility Regulator has considered in full all of the points made in the responses to the consultation.
- 1.16. Both Power NI and Action Renewables (ARET) are already requiring actual export meter readings and a declaration from clients. Naturgy has not stated whether they currently obtain an export meter reads from a micro-generators or if this would be a burden. They are however supportive of DR1202.
- 1.17. Naturgy is supportive of DR1202. Naturgy do however state:
- The current Deemed Solution remains fit for purpose until such time as the systems limitation is removed regarding a nominated export supplier/agent who can be sent NIEN facilitated export meter reads.*
- 1.18. Budget Energy and INFRAM do not require export meter reads at present. Both have stated doing so under DR1202 would place an additional strain on administration resources. Budget Energy have not stated how much it would cost to provide export meter reads. INFRAM have stated this resource could cost £246k per year.
- 1.19. Budget Energy believe that the proposed move to obtaining actual export meter reads as set out in DR1202 is unnecessary and a substantive benefits case has not been clearly outlined. They state that the benefits of this export meter read





arrangement in relation to micro-generators are minimal to the generator and Budget Energy.

- 1.20. Budget Energy's view is that the submission of a meter read should not be requiring factor to validate if a site has been successfully connected under the G98 procedure, but rather the submission of a MPRN per site could be cross referenced with the DNO successful G98 application records.
- 1.21. Given both Power NI and ARET can and do obtain export meter reads, our view is that this is practically possible and not an overly onerous task.
- 1.22. Budget Energy believes a review of the 45% Deemed value may provide a more accurate and fair representation of the micro-generator exported volumes and together with the introduction of a single site MPRN verification with NIE Networks to ensure that each micro-generator is properly connected and commissioned as per the G98 connection process, could mitigate any concerns in this area.
- 1.23. Furthermore the alternative cost of being required to consume electricity from the distribution network compared to the cost per unit of consuming from the network for the micro-generator is almost four (4) times greater than the financial reward of exported generation. This in itself, incentivises the micro-generator to use as much energy on site as possible.
- 1.24. Budget Energy states that a supplier-gained export reading to help establish Distribution capacity or future Distribution System planning should not be required as information on exported generation units is already available to NIE Networks.
- 1.25. We acknowledge that INFRAM's customer base is different from that of Power NI and ARET. INFRAM has stated that:

*large number of these installations are located on social housing properties, where many tenants are considered vulnerable. Collecting manual readings under the current circumstances feels an unjustified increase in tenants risk exposure for both these tenants and our contractors who will be required to obtain such readings.*
- 1.26. We do not consider that such a risk now exists to the extent highlighted by INFRAM.
- 1.27. INFRAM further contend that:

*the implementation of DR1202 would create an interaction with contractors that would not otherwise be required.*



and

*Accessing these meters can often prove difficult given meters are located inside domestic premises, where suppliers and generators are dependent on holding direct contractual rights with or securing the consent of the owner of such property. In cases where occupants are unwilling to allow access, DR1202 would result in no revenue being claimed for these sites through no fault of our own.*

- 1.28. We acknowledge that this could potentially place an additional burden on companies, which may differ depending on the nature of their business models and customer base. However, we consider that burden to be proportionate in view of the advantages of using meter readings. SSE agrees with Budget that there will be an additional administrative burden on suppliers and could create a confusing customer journey, but still supports DR1202 on the basis that customers will be incentivised to provide readings to ensure payment. We recognise this would not apply in a rent-a-roof scenario where the resident is not the one receiving the payments. Both Budget Energy and INFRAM could consider alternative means to obtain export meter reads and if necessary incentivise home owners to provide meter reads and/or access.
- 1.29. Again, INFRAM and Budget Energy reference Smart Meters and the development of a smart and digitised energy system. We are aware of the installation of Bluetooth freedom units by NIE Networks. Obtaining meter reads via this method could be explored prior to any potential Smart Meter roll out. There are currently no plans to provide a solution such as the GB FiT model<sup>5</sup>.
- 1.30. Those in favour of DR1202 agreed that the use of actual export meter reads would be more accurate than using a percentage figure.
- 1.31. UR views the main benefits of providing actual meter reads as:
  - Consumer will be billed on an actual volume. This would reduce any material impact on the supplier who in turn will be settled in the electricity market on actual consumption.
  - Actual volume would be beneficial by allowing NIE Networks to identify where local constraints on the system require investment or reinforcement creating more efficient investment decisions.
  - It could encourage active management of electricity consumption by the household
  - The process of meter readings allows a validation process to take place to show that the micro-generator was properly connected, commissioned and working.
  - Potential support from future energy mechanisms developed by the Department for the Economy (DfE) in the Energy Strategy may be informed

<sup>5</sup> <https://www.ofgem.gov.uk/environmental-and-social-schemes/feed-tariffs-fit>



and targeted as well as more fairly underpinned by an actual meter reading solution rather than a Deemed Solution.

- 1.32. Several of the respondents have suggested that NIE Networks should provide export meter reads and that DR1202 should not be implemented until then. NIE Networks does not have a legal obligation to read export meters. The UR considers that the benefits of providing meter reads should not be delayed until then.
- 1.33. NIE Networks has confirmed that when reading import meters it will also read the export meter but only where it is easily accessible. There is however no provision currently built into the market systems to allow export meter reads to be provided to suppliers. The export meter reads are not used by NIE Networks other than to confirm the working of the meter. Any such change to the market system would have to flow from a further amendment to the Market Registration Code following the CDA change process. All suppliers would also have to change their market systems to allow this to happen.
- 1.34. Naturgy further considers that altering systems design to facilitate the nomination of an 'Export Supplier' at the MPRN would be beneficial and that export reads should be separate from an import reads allowing for different suppliers. Naturgy stresses that import suppliers have no right to export readings, it is unfair to export suppliers and gives import suppliers an advantage and that it should be changed before the new methodology is adopted.
- 1.35. Budget Energy raise concerns that during a meter exchange, it's likely the export reading will be reset. This can happen at various intervals within the export settlement year, with the potential for a number of closing and opening reads to be required in order to ascertain the exact exported volumes. The UR considers that this process will have to be carefully monitored by NIE Networks to ensure exported volumes are not lost.
- 1.36. Other concerns raised were in relation to smart metering and that any decision or recommendations should be considered in terms of alignment with DfE Energy Strategy Consultation and that the Deemed Solution should remain in place until smart metering is implemented. While the deemed solution could be seen to be an interim step to smart metering programme the decision on smart metering has yet to be taken. To continue with the Deemed Solution indefinitely prevents the realisation of benefits of providing actual meter reads.
- 1.37. Under the heading 'Create a Flexible, Resilient and Integrated Energy System' in DfE's Energy Strategy - Path to Net Zero Energy paper, published on 16 December 2021, is an objective to provide 'An accessible and digitised energy system where data provides value for consumers and system operation'. In doing so DfE will:



*‘Carry out a cost benefit analysis of electricity and gas smart meters and other technologies in order to access half-hourly and daily consumption information’*

and that

*‘This will consider the latest technology solutions, including smart meters that can enable consumers (individually and collectively) and the industry to access and use up-to-date electricity consumption data’*

- 1.38. In the consultation, UR highlighted the RoI’s National Smart Metering Programme<sup>6</sup> as an example whereby every electricity meter will be replaced with a next-generation smart meter by the end of 2024. These new smart meters will record details of electricity consumption and any electricity exported onto the grid and will include events, alerts and instrumentation data related to the power supply to the premises.
- 1.39. Consideration of smart metering to assist in the collection of export meter reads will be given as DfE develops its plan.
- 1.40. Budget Energy consider that making a direct comparison between the costs in different jurisdictions across a different timeframe would require further careful consideration given differing capex costs and payback timescales.
- 1.41. ARET has stated it has approximately 100 individual clients who are unable to take a physical meter reading due to age or disability. As detailed in the consultation paper NIE Networks can relocate a meter to a more accessible location, at no charge, when requested to do so.
- 1.42. All respondents agreed that if the ‘deemed solution’ remains then the deemed percentage to be reviewed annually.
- 1.43. Budget Energy is also of the view that there is the potential that suppliers could be underpaying for these exported units in the wholesale market, which could be beneficial to consumers. However, if the deemed value was reviewed as proposed in DR1203, then the impacts on consumers in this regard would be mitigated, as a reviewed deemed value may provide a better representation of actual unit exported by micro-generators. If DR1203 was approved the UR would consider a review of the 45% figure a necessary requirement.
- 1.44. CCNI requested more detail around the likely costs associated with administering meter readings as set out in DR1202 and the impact this would have on consumer bills. This will be provided as part of the introduction of meter reads as suppliers produce their impact assessments.

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<sup>6</sup> <https://www.cru.ie/home/smart-meters/national-smart-metering-programme/>



- 1.45. Power NI has stated that it already pays customers for their actual export based upon meter reads. Power NI does not envisage any issues with implementing DR1202 as it already has processes and procedures in place to collect actual meter reads.
- 1.46. ARET also collates actual export readings and a declaration from clients. ARET is satisfied that it can comply with the proposal presented in DR1202 for clients who do submit readings.
- 1.47. Given Power NI's percentage of the market detailed above and that ARET also collects meter reads the impact on consumer bills is likely to be small.
- 1.48. Power NI considers there is no relevance in linking export to the NIRO year, they are entirely separate and unrelated matters. A change to the export year would have a significant adverse impact on Power NI's extensive micro-generation customer base.
- 1.49. ARET, Budget Energy and INFRAM support alignment of export meter reads to the NIRO year. NIE Networks has stated it can facilitate an alignment but has concerns over the validity of submissions for the 13 month period following implementation.
- 1.50. In Budget Energy's view, if the April – March half hour profile used by NIE Networks for settlement of microgeneration volumes in the wholesale market is not aligned with a new export tariff year of April – March then only settlement of those export values settled to the supplier will be passed on to the micro-generator. This may cause a slight discrepancy between the volumes claimed using the Deemed Solution and those actually settled to the Supplier in the wholesale market. UR accepts there could be a slight discrepancy but we have not been provided with any significant costs analysis to consider and this amount is unlikely to be significant.



## 2. Utility Regulator Board decision

### Board Meeting on 17 February 2022

- 2.1 At its meeting on 17 February 2022 the Utility Regulator Board considered the responses to the consultation, the issues raised and arguments put forward by respondents both for and against each of the Change Requests.
- 2.2 The Board decided to approve the implementation of DR1202 (the requirement for suppliers to be settled in the wholesale market on actual meter reads and removing the 'deemed' solution) for the new settlement period coming into effect on 1 October 2022. As such, the Board rejected the implementation of DR1203.

### Next Steps

- 2.3 The decision will be published through our normal channels. This decision was relayed, through CDA, to suppliers on 8 March and to respondents individually.
- 2.4 As per the requirements of the MRC, CDA will complete the change request process and implement changes to the market systems to facilitate the introduction of meter reads for the start of the new settlement period in October 2022.
- 2.5 Suppliers and agents will have until the start of September 2022 to provide NIE Networks with their first reads.