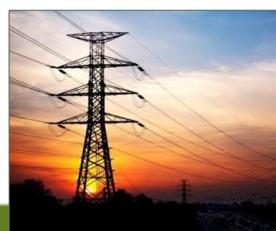


Consultation on seasonal multipliers used in the calculation of short term entry capacity tariffs

29 April 2015



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; Electricity; Gas; Retail and Social; and Water. The staff team includes economists, engineers, accountants, utility specialists, legal advisors and administration professionals.

Our Mission

Value and sustainability in energy and water.

Our Vision

We will make a difference for consumers by listening, innovating and leading.

Our Values

Be a best practice regulator: transparent, consistent, proportional, accountable, and targeted.

Be a united team.

Be collaborative and co-operative.

Be professional.

Listen and explain.

Make a difference

Act with integrity.

Abstract

This paper sets out our proposals for the seasonal multipliers that will be applied when setting gas entry capacity tariffs from 1 October 2015. Following this consultation the seasonal multipliers to be applied will be published in July.

Audience

This document is likely to be of interest to regulated companies in the energy industry, government and other statutory bodies and consumer groups with an interest in the energy industry.

Consumer impact

The changes are necessary to ensure compliance with the European Gas Regulation and in particular the network codes required by the Regulation.

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1. Introduction

Purpose of this paper

- 1.1. The Utility Regulator published a [Conclusions](#) Paper on the introduction of entry charges into the Northern Ireland postalised regime for gas, published on 5th February 2015. We indicated that we would establish the level of seasonal multipliers to be effective from 1 October 2015 during the tariff calculation process in June and July 2015. We envisage that these seasonal multipliers will apply until the Network code on Tariffs is implemented in Northern Ireland.
- 1.2. The February Conclusions paper also indicated that we would review the appropriateness of applying the seasonal multipliers applicable in Republic of Ireland to the Northern Ireland regime in order to minimize the impact of any divergence on the Single Electricity Market (SEM). This paper therefore considers this issue and proposes the seasonal multiplier to be effective from 1 October 2015.
- 1.3. This paper also considers how the existing annual administrative fee for the Virtual Reverse Flow (VRF) service in Northern Ireland should be converted into pence per kilowatt charge. The Network code on Interoperability and Data Exchange Rules requires transmission system operators (TSOs) to adopt the use of kWh and auction reserve prices are expressed as pence per kWh/day charge. Therefore the reserve price for VRF needs to be expressed as pence per kWh/day charge.

Next Steps

1.4. Following consideration of the responses to this consultation the Utility Regulator will publish the seasonal multipliers to be used in the calculation of gas entry tariffs effective from 1 October 2015. We expect to do this in early July.

Responding to this consultation

1.5. Responses to this consultation paper should be submitted by 12.00 noon on Wednesday 10th June 2015. Responses should be sent to:

Graham Craig

Gas Branch

Utility Regulator

Queens House

14 Queens Street

Belfast BT1 6ER

graham.craig@uregni.gov.uk

1.6. The Utility Regulator's preference would be for responses to be submitted by e-mail.

1.7. Individual respondents may ask for their responses (in whole or in part) not to be published, or that their identity should be withheld from public disclosure. Where either of these is the case, the Utility Regulator will also ask respondents to supply the redacted version of

the response that can be published.

1.8. As a public body and non-ministerial government department, the Utility Regulator is required to comply with the Freedom of Information Act (FOIA). The effect of FOIA may be that certain recorded information contained in consultation responses is required to be put into the public domain. Hence it is now possible that all responses made to consultations will be discoverable under FOIA, even if respondents ask us to treat responses as confidential. It is therefore important that respondents take account of this and in particular, if asking the Utility Regulator to treat responses as confidential, respondents should specify why they consider the information in question should be treated as such.

1.9. This paper is available in alternative formats such as audio, Braille etc. If an alternative format is required, please contact the office of the Utility Regulator, which will be happy to assist.

2. Analysis & Proposals

2.1. This section presents our analysis of the appropriateness of applying the seasonal multipliers applicable in Republic of Ireland to Northern Ireland. It considers past experience in Republic of Ireland and the impact on the SEM.

2.2. As part of this review we sought advice from independent advisors to assist us in developing our policy and we provide an overview of the modeling carried out.

Experience in Republic of Ireland

2.3. The Commission for Energy Regulation (CER) consulted on seasonal multipliers for short term exit capacity tariffs in 2012. Although this is the reverse of the situation in Northern Ireland where the short term products will be at entry, in economic terms, the effects on relative prices and incentives are the same.

2.4. At that time the key argument in favor of having very seasonal short term capacity tariffs was to encourage network users to book annual capacity. But allowing certain network users with a counter seasonal pattern of peak offtake to be rewarded for contributing to network usage without requiring the provision of increased network capacity.

2.5. Long term capacity booking means the costs faced by network users are aligned with the costs of network owners which economic theory suggests is necessary for an economically efficient outcome. In addition certain groups of network users are more able to follow a pattern of seasonal capacity booking than others. In a situation where capacity charges had a consistent unit rate irrespective of duration or season this could lead to an undue transfer of cost from the former to the latter class of consumer. In practice this would result in costs being transferred from power generation to domestic consumers. Finally any seasonality in the pattern of capacity booking may cause cash flow issues for the network owner for whom costs as noted above are on the whole consistent across the year.

2.6. The CER after considering all the evidence presented, concluded for a number of reasons to introduce capacity charges whose unit rate increased substantially as the duration decreased. And that were highly seasonal with the unit rate for the same duration capacity product being much higher in the peak winter months than in the base summer months.

2.7. The sector whose behavior is most likely to be impacted by seasonal multipliers is gas fired power generators. This is not only because of the ability of generators to match capacity bookings with offtake requirements over the year. But also because of the impact such decisions might have on a generators competitive position within the Single Electricity Market. (SEM). Analysis by our advisors however indicates that there is little evidence to suggest that the structure of

annual and short term capacity tariffs has had any noticeable impact on the dispatch of gas fired power generation located in the Republic of Ireland.

2.8. Two reasons are given for this. Firstly the level of electricity demand is such that for most of the year gas fired generators are the marginal price setting generator within the wholesale market. Secondly any impact from capacity charges is swamped by the spark spread between the wholesale price of gas and other fuels.

Northern Ireland Modeling

2.9. We modeled the impact of applying the Republic of Ireland seasonal multipliers (daily, monthly and annual) to entry capacity tariffs in Northern Ireland. Equivalent multipliers for quarterly and within day were not available.

2.10. In order to do this we made certain assumptions about the capacity booking behavior of network users following the introduction of these short term products. In the analysis 75.5% of total capacity bookings were assumed to be of annual capacity, 22.5% of monthly capacity and 2% of daily capacity. For the purposes of this analysis these assumptions were built up from an analysis of individual network users, power generators and distribution networks, likely behavior.

2.11. It was also assumed that gas consumption would not be impacted by the availability of short term products. This is because in the Republic of Ireland gas fired generation is the marginal form of generation for most of the year and alternative fuel prices will have a much greater impact on the pattern of generation than will capacity charges.

2.12. The resulting analysis indicates that the application of the Republic of Ireland seasonal multipliers would actually increase total annual revenues and consequently the tariff level overall would need to be reduced to match collected and allowed revenue. The analysis also indicated a stable pattern of revenue over the year with deviation in monthly revenue being limited to between +/-2% of existing revenue.

Single Electricity Market Interactions

2.13. It has been suggested that adopting the Republic of Ireland seasonal multipliers will assist Northern Ireland gas fired generators compete more effectively with those in the Republic of Ireland. Under the SEM market rules generators are only permitted to bid short term marginal production costs into the wholesale electricity market. Whole daily capacity charges are permissible to be included in submitted bids. Longer term capacity charges and other long term costs are expected to be funded through a combination of intra marginal rents and a separate capacity payment mechanism. It

would appear counter intuitive to argue that the competitive position of Northern Ireland generators was improved by increasing the costs they were required to bid into the wholesale market.

2.14. Another argument is that having the same capacity products with the same tariff structures available to gas fired generators in both jurisdictions will lead to more efficient outcomes within the wholesale electricity market. To ensure that the market operates in the most economically efficient way, consistency is a valid objective. However, these benefits are to some extent negated by the network constraints that exist within the SEM that over ride the outcomes that would result from adherence to the merit order. It should also be noted that consistency must not be considered as being sufficient justification for introducing products or tariff structures in Northern Ireland that would result in economically undesirable outcomes.

Conclusions on Irish experience

2.15. Having considered the evidence we believe that it is appropriate to adopt the seasonal multipliers that are currently applicable in the Republic of Ireland. Our own analysis in the Northern Ireland context indicates that they will limit any movement towards the use of short term entry capacity products, consequently the tendency will be for total collected revenue to increase. This will require the general level of capacity tariffs to decrease to align collected and allowed revenue. Our analysis also indicates that the pattern of monthly capacity revenues will be similar to the current position thus protecting transmission owner's cash flow position.

2.16. As has been the case in the Republic of Ireland it is not expected that the competitive position of gas fired generators against other forms of generation will be impacted to any meaningful extent. We are unconvinced that the competitive position of Northern Ireland gas fired generators will be improved vis a vis those in the Republic of Ireland. However we do recognise that the alignment of capacity products and tariff structure in both jurisdictions could lead to more efficient outcome in the wholesale electricity market.

Quarterly and within day seasonal multipliers

2.17. Two additional short term capacity products will be made available in gas year 2015-16 which are not currently available in either Republic of Ireland or Northern Ireland - a quarterly entry capacity product and a within day entry capacity product.

2.18. With regard to the quarterly product we consider that a simple summation of the monthly adjustment factors would appear appropriate. This would mean that the tariff paid by a network user for the quarterly product would be equal to that they would have paid had they purchased capacity for each of the three months within the quarter separately.

2.19. With regard to the within day product, there is no Northern Ireland or Republic of Ireland evidence base on which to make any judgments. There are within day entry products on the National Grid system in Great Britain but these have discounted tariffs rather than

tariff multipliers and are therefore not appropriate for our situation.

2.20. Having considered the issue of increased transaction costs from having to provide within day entry products we can find no evidence of any significant scale of any additional cost. In any case it is likely to be marginal given that the product is being introduced as part of a wider package of reform. We therefore propose that within day capacity tariffs are calculated using the same seasonal multipliers as the daily capacity product.

3. Seasonal multipliers proposed

3.1. This section sets out our proposals for seasonal multipliers to be applied to each non-annual capacity product from 1 October 2015.

3.2. It should be noted that before finalising the seasonal multipliers for Northern Ireland this summer we will liaise with the CER as to the seasonal multipliers they intend to apply from 1 October year 2015. If the multipliers in Republic of Ireland change we will consider the impact of this on our proposals below.

3.3. The tariff for any of the non annual capacity products is calculated by multiplying the annual tariff by the appropriate seasonal multiplier.

3.4. If the annual capacity tariff was £1 per kWh/day then over a year £365 would be payable for a kWh of capacity. In respect of monthly capacity in January the tariff would be £112.785 per kWh. The tariff per kWh/day in January would be £112.785 divided by 31 (the number of days in January), i.e £3.638.

3.5. Similarly the tariff for monthly capacity in July would be £3.65 per kWh or £0.117 per kWh/day.

Monthly and Daily Capacity Products

3.6. We propose that from 1 October 2015 the following monthly and

daily seasonal multipliers in Table 1 below should apply.

Table One - Seasonal multipliers for short term capacity tariffs from 1 October 2015

Month	Capacity Product	
	Monthly	Daily
October	13.2%	0.66%
November	13.2%	0.66%
December	17.6%	1.18%
January	30.9%	2.06%
February	35.3%	2.35%
March	26.5%	1.76%
April	13.2%	0.66%
May	1.0%	0.05%
June	1.0%	0.05%
July	1.0%	0.05%
August	1.0%	0.05%
September	1.0%	0.05%
Annual	155%	289%

Question 1: Are respondents content with our approach to setting monthly and daily entry capacity tariffs?

Quarterly Capacity

3.7. We propose that from 1 October 2015 the following quarterly

seasonal multipliers should apply.

Table Two - Seasonal multipliers for quarterly capacity tariffs from 1 October 2015

Quarter	Adjustment
October - December	44.0%
January - March	92.7%
April - June	15.2%
July - September	3.0%
Annual	155%

Within Day Capacity

3.8. We propose that from 1 October 2015 the following within day seasonal multipliers should apply.

Table Three - Seasonal multipliers for within day capacity tariffs from 1 October 2015

Month	Within Day
October	0.66%
November	0.66%
December	1.18%
January	2.06%
February	2.35%
March	1.76%
April	0.66%
May	0.05%

June	0.05%
July	0.05%
August	0.05%
September	0.05%
Annual	289%

Question 2: Are respondents content with our approach to setting quarterly and within day entry capacity tariffs?

4. Virtual Reverse Flow charge

4.1. Finally it is necessary to set a tariff for Virtual Reverse Flow (VRF) exit capacity made available at both interconnection points, Moffat and Gormanston. At present there is an annual registration fee of £5,000 for each network user wishing to use the VRF product irrespective of how little or how much is booked.

4.2. For the purpose of this discussion we will assume that VRF capacity is only available at Moffat as there is no forward flow of gas into Northern Ireland at Germantown.

4.3. It has been suggested that as the maximum permitted level of VRF booking¹ is limited to a level that means there is no possibility of interruption, a firm exit tariff should be applied. An alternative view might be that as VRF requires no additional pipeline capacity to be

¹ This is currently 1,228 MWh per day.

built the tariff should be zero. Neither of these is consistent with our current approach to multipliers for daily products and we see no reason at this time to change our current policy position.

4.4. If we set the VRF tariff at the minimum possible tariff of 0.0001 pence per day per KWh then to recover £5,000 would require capacity bookings of 50 million Kwh or 41 days of maximum VFR capacity bookings (1228 Mwh per day). Any increase in the available capacity would reduce the number of days required to reach the current administration fee. It therefore seems reasonable to have a minimum tariff for this capacity product.

Proposal for VRF tariff

4.5. We propose that from 1 October 2015 the Virtual Reverse Flow capacity tariff should be 0.0001 pence per day per Kwh.

Question 3: Are respondents content with our approach to setting the Virtual Reverse Flow capacity tariff?

Appendix 1: List of consultation questions

Q1	Are respondents content with our approach to setting monthly and daily entry capacity tariffs?
Q2	Are respondents content with our approach to setting quarterly and within day entry capacity tariffs?
Q3	Are respondents content with our approach to setting the Virtual Reverse Flow capacity tariff?