

# HYDRO BENEFIT REPLACEMENT SCHEME AND COMMON TARIFF OBLIGATION

Three-yearly review of statutory schemes

Closing date: 6<sup>th</sup> September 2019





© Crown copyright 2019

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit <u>nationalarchives.gov.uk/doc/open-government-licence/version/3</u> or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email: <u>psi@nationalarchives.gsi.gov.uk</u>.

Where we have identified any third-party copyright information you will need to obtain permission from the copyright holders concerned.

Any enquiries regarding this publication should be sent to us at: <a href="mailto:enquiries@beis.gov.uk">enquiries@beis.gov.uk</a>

# Contents

General information	4
Why we are consulting	4
Consultation details	4
How to respond	
Confidentiality and data protection	
Quality assurance	
Purpose of these statutory schemes: Hydro Benefit Replacement Scheme, Common Tariff Obligation and Shetland cross-subsidy	
Why the schemes are being reviewed	
2. Hydro Benefit Replacement Scheme and Common Tariff Obligation	
Objectives of the schemes	8
Operation of the schemes	9
Government proposal	9
3. Delivering the Shetland cross-subsidy	11
Rationale for GB-wide funding	11
Design of the proposals	11
	11
Flow of assistance relating to the Shetland cross-subsidy	12
Specifying the level of the Shetland cross-subsidy and the assistance amount $\hat{z}$	12
Calculation of tariff for the Shetland cross-subsidy assistance amount	13
Wider aspects	14
Timing and next steps	14
	16
Annex A: Background to the schemes 2	17
Hydro Benefit Replacement Scheme	17
	18
Shetland cross-subsidy	18
	19
Annex C: Process of calculating and collecting the Shetland cross-subsidy via the Hydro Benefit Replacement Scheme	20

# **General** information

## Why we are consulting

The Government must review the Hydro Benefit Replacement Scheme and the Common Tariff Obligation every three years. These schemes help protect consumers in the North of Scotland from the high costs of electricity distribution in that area. This consultation forms part of the review process, and views are invited from any interested parties on whether the schemes continue to meet their policy objectives and are operationally effective. Views are also invited on a proposed mechanism to deliver a revised funding arrangement for the Shetland crosssubsidy from April 2020 onwards, which will have the effect of reducing electricity distribution costs for all consumers in the North of Scotland.

# Consultation details

**Issued:** 12<sup>th</sup> July 2019

Respond by: 6<sup>th</sup> September 2019

#### Enquiries to:

Electricity Systems Team Department for Business, Energy and Industrial Strategy 3rd Floor 1 Victoria Street London, SW1H 0ET

Tel: 0300 068 5827 Email: <u>hydrobenefitreview@beis.gov.uk</u>

Consultation reference: Hydro Benefit Replacement Scheme and Common Tariff Obligation

#### Audiences:

This consultation is particularly relevant to any parties with a direct interest in the level of electricity prices in the North of Scotland, as well as to electricity suppliers across Great Britain. This consultation is not limited to these parties; responses are welcome from any organisation or individual is welcome to respond.

#### **Territorial extent:**

Great Britain

### How to respond

Your responses will be most useful if it is framed in direct response to the questions posed, though further comments and evidence are also welcome.

#### Email to: hydrobenefitreview@beis.gov.uk

or

Write to:

Electricity Systems Team Department for Business, Energy and Industrial Strategy 3rd Floor 1 Victoria Street London, SW1H 0ET

When responding, please state whether you are responding as an individual or representing the views of an organisation.

## Confidentiality and data protection

Information you provide in response to this consultation, including personal information, may be disclosed in accordance with UK legislation (the Freedom of Information Act 2000, the Data Protection Act 2018 and the Environmental Information Regulations 2004).

If you want the information that you provide to be treated as confidential please tell us, but be aware that we cannot guarantee confidentiality in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not be regarded by us as a confidentiality request.

We will process your personal data in accordance with all applicable UK and EU data protection laws. See our <u>privacy policy</u>.

We will summarise all responses and publish this summary on <u>GOV.UK</u>. The summary will include a list of names or organisations that responded, but not people's personal names, addresses or other contact details.

### Quality assurance

This consultation has been carried out in accordance with the government's <u>consultation</u> <u>principles</u>.

If you have any complaints about the way this consultation has been conducted, please email: <u>beis.bru@beis.gov.uk</u>.

# 1. Introduction

This section describes a number of Government measures that help protect consumers in the North of Scotland from the high costs of electricity distribution in that region, and explains why these measures must be reviewed periodically.

## Purpose of these statutory schemes: Hydro Benefit Replacement Scheme, Common Tariff Obligation and Shetland cross-subsidy

The challenges of electricity supply in the North of Scotland – primarily related to the relatively large and sparsely populated terrain – mean that it inevitably costs much more to distribute electricity here than elsewhere. The following paragraphs describe three complementary measures that ensure consumers in the North of Scotland do not bear an unreasonable burden of these electricity distribution costs.

The Hydro Benefit Replacement Scheme protects domestic and non-domestic consumers from the high costs of distributing electricity in the North of Scotland. In 2018/19, it is providing an annual assistance amount of £61m<sup>1</sup> to consumers in the North of Scotland, which Ofgem estimates to be worth around £40 per household in that area. The scheme is funded by charges on all licensed electricity suppliers across Great Britain. It is established under the Energy Act 2004 (Assistance for Areas with High Distribution Costs) Order 2005, which is made under section 184 of the Energy Act 2004. The assistance from the scheme ensures that electricity distribution network charges in the North of Scotland<sup>2</sup> are not markedly higher than those for the next highest charging regions, without weakening each network company's local accountability to its customers and hence risking an overall increase in network costs across the country. Scottish Hydro Electric Power Distribution (SHEPD) is the licensed electricity distribution network operator for the North of Scotland.

The Common Tariff Obligation ensures electricity suppliers in the North of Scotland are not able to charge comparable domestic consumers different prices solely on the basis of their location within the region. This is designed to protect consumers in remote rural areas or islands from the relatively high costs of supplying electricity in these areas. The Common Tariff Obligation is set out in the Electricity Act 1989 (Uniform Prices in the North of Scotland) Order 2005, which is made under section 7B of the Electricity Act 1989.

The Common Tariff Obligation also helps to underpin a cross-subsidy arrangement for most electricity consumers on Shetland, who would otherwise face significantly higher electricity prices than comparable consumers on the mainland<sup>3</sup>. This Shetland cross-subsidy amounted to £18.69m in 2017/18<sup>4</sup>. The resulting costs are currently spread across the charges paid by

<sup>&</sup>lt;sup>1</sup> Charging Statement 2018-19, available at <u>https://www.nationalgrideso.com/charging/assistance-areas-high-electricity-distribution-costs-aahedc</u>

<sup>&</sup>lt;sup>2</sup> Schedule 1 to the Energy Act 2004 (Assistance for Areas with High Distribution Costs) Order 2005 describes the geographic area covered by the Hydro Benefit Replacement Scheme.

<sup>&</sup>lt;sup>3</sup> The cross-subsidy is for all domestic consumers on Shetland, as well as all existing non-domestic consumers at 1 April 2015 and, from the same date, all new non-domestic consumers with a maximum demand connection of 2 megawatts.

<sup>&</sup>lt;sup>4</sup> Source: Ofgem

electricity suppliers to use the electricity distribution network in the North of Scotland. Suppliers will then pass these costs onto electricity consumers in the North of Scotland. However, these costs are rising due to the implementation of a new energy solution for Shetland from mid-2019 onwards. In order to support consumers in the North of Scotland, the Government confirmed in March 2015<sup>5</sup> that the full costs of the cross-subsidy for Shetland would be spread over Great Britain (GB) following the implementation of a new energy solution for Shetland. In reaching this view, the Government took account of Shetland's unique circumstances in having the only licensed distribution network in GB which is not currently connected to the mainland electricity network. The intended change will have the effect of reducing electricity distribution costs for all consumers in the North of Scotland. In July 2016<sup>6</sup>, Government confirmed that this cross-subsidy arrangement would be delivered through the Hydro Benefit Replacement Scheme, as this provides an efficient and transparent approach. For the avoidance of doubt, this consultation does not relate to the cost of ensuring Shetland's security of supply, which remains a matter for SHEPD and Ofgem.

Background information on the three measures is set out at Annex A.

## Why the schemes are being reviewed

The Energy Act 2004 requires the Hydro Benefit Replacement Scheme to be reviewed every three years, with the last review undertaken in 2015/16. A Ministerial commitment was made to review the working of the Common Tariff Obligation in parallel with the statutory review of the Hydro Benefit Replacement Scheme.

The Government previously concluded that the costs of the Shetland cross-subsidy should be recovered from all GB consumers through the Hydro Benefit Replacement Scheme, following the implementation of a new energy solution for Shetland<sup>7</sup>. This consultation provides the opportunity to consider the proposed detailed arrangements for this.

The Government's proposed retention of the Hydro Benefit Replacement Scheme and the Common Tariff Obligation, and the detailed proposals for amending the Hydro Benefit Replacement Scheme to spread the costs of the Shetland cross-subsidy across GB consumers, are set out in this consultation document. We would welcome views from any interested parties on our proposals by 6<sup>th</sup> September 2019.

<sup>6</sup> <u>https://www.gov.uk/government/consultations/hydro-benefit-replacement-scheme-and-common-tariff-obligation-three-year-review-of-statutory-schemes-consultation</u>

<sup>&</sup>lt;sup>5</sup> <u>https://www.gov.uk/government/consultations/support-for-non-domestic-electricity-consumers-on-shetland</u>

<sup>&</sup>lt;sup>7</sup>http://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/534154/Government\_Response\_Hy dro\_Benefit\_4\_July.pdf

# 2. Hydro Benefit Replacement Scheme and Common Tariff Obligation

This section seeks views on whether the Hydro Benefit Replacement Scheme and Common Tariff Obligation continue to meet their policy objectives and are operationally effective.

# Objectives of the schemes

Electricity distribution charges vary regionally to reflect the costs of running the network in a specific area and the number of consumers those costs are spread across. This cost reflective approach helps to minimise overall network costs across GB by ensuring that each network company has to account to its local stakeholders for the costs it has incurred. The typical GB household has seen a real terms reduction in electricity distribution charge of £7 from April 2014 to April 2019, with an even larger decrease seen in the North of Scotland (see Annex B). At the same time, there have been service improvements for customers. For example, the number of customer interruptions across GB has fallen on average by 11% over the period<sup>8</sup>. The Government therefore believes that, in general, cost reflective charging continues to represent the right approach to achieve value for consumers.

However, the Government also believes that it should consider intervention if one region has markedly different charging levels to any other. This forms the rationale for the Hydro Benefit Replacement Scheme. The assistance amount provided by the scheme, which is adjusted annually to take account of inflation, plays an important part in helping to alleviate the inevitably high costs of electricity distribution for consumers in the North of Scotland. Without this support, costs would be significantly higher in the North of Scotland than any other region, with resulting impacts on affordability and levels of fuel poverty.

Whilst the Hydro Benefit Replacement Scheme protects consumers as a whole across the North of Scotland, it does not (and never could) provide an efficient or effective way of providing targeted support to a specific group of vulnerable consumers within a region. Instead, it is the purpose of other schemes to provide more targeted assistance for households where appropriate.

The costs of supplying electricity to remote, rural and island areas of the North of Scotland will inevitably remain higher than to urban areas in the North of Scotland. The Common Tariff Obligation continues to fulfil the social objective of ensuring that remote, rural households are not disadvantaged by a price differential in electricity distribution costs within the North of Scotland. In previous reviews of the Common Tariff Obligation, stakeholder concerns have been expressed that the Common Tariff Obligation might be misinterpreted as preventing households in the North of Scotland living in close proximity to renewable generation from being offered a local generation tariff. However, the Government has been clear that this is not the policy intent of the Common Tariff Obligation, and it has never seen any evidence to suggest that it has been misinterpreted in this way.

<sup>&</sup>lt;sup>8</sup> Further information contained in Ofgem's RIIO Electricity Distribution Annual Report 2017-18 available at: https://www.ofgem.gov.uk/publications-and-updates/riio-electricity-distribution-annual-report-2017-18

# Operation of the schemes

In establishing the Hydro Benefit Replacement Scheme, the Government sought to ensure that the scheme's administration would be cost efficient and that its operation would be clear and unambiguous for all parties. The Government considers that these requirements continue to be met through the existing arrangements. Administration costs are provided for through a small, fixed fee linked to the Retail Price Index (RPI) which represents less than 0.2% of the total value of the assistance amount provided by the scheme. In order to ensure transparency of the scheme's operation, National Grid Electricity System Operator ("National Grid ESO"), is required to publish an annual statement<sup>9</sup>. This statement includes: the total actual metered demand by domestic and non-domestic consumers in the North of Scotland in the previous year; the total amount that was actually invoiced to licensed suppliers across GB; any over- or under-recovery from those suppliers; the value of the RPI which will be used to determine the assistance amount in the following year; and the total level of the assistance amount that will be required in the following year. Use of RPI as an inflation index is consistent with Ofgem's current electricity distribution price control<sup>10</sup>. In the event that Ofgem move in the next price control from RPI to CPIH (Consumer Prices Index including owner occupiers' housing costs), the Government would consult as part of the next three-yearly review of the scheme on the basis of also making this change.

The Hydro Benefit Replacement Scheme was established on the basis that the competitive market for electricity supply in the North of Scotland would be sufficient to ensure that assistance provided through the scheme would feed through to consumers<sup>11</sup>. The Government has seen no evidence to suggest that this arrangement does not function, and therefore proposes to continue the current operational arrangement.

The Common Tariff Obligation is a self-sufficient scheme which has no direct costs associated with it. The Government therefore does not see any way to improve its implementation.

## Government proposal

The Government believes that the original policy objectives of both schemes remain relevant and those objectives are being met. Hence the Government proposes to retain both schemes in their current form, with the exception of the Shetland cross-subsidy related changes outlined in the following section.

#### **Consultation questions**

1. Do you agree that the policy objectives of the Hydro Benefit Replacement Scheme and Common Tariff Obligation – which are focused on ensuring that consumers in the North of Scotland are not unreasonably disadvantaged by the price differential in electricity distribution costs – remain valid?

<sup>&</sup>lt;sup>9</sup> https://www.nationalgrideso.com/charging/assistance-areas-high-electricity-distribution-costs-aahedc

<sup>&</sup>lt;sup>10</sup> Ofgem uses periodic price controls to set the amount of money that network companies can earn. The price control for electricity distribution runs from 2015-23.

<sup>&</sup>lt;sup>11</sup> The assistance amount is collected by National Grid ESO from all licensed suppliers across GB, and then passed to Scottish Hydro Electric Power Distribution (as the Distribution Network Operator for the North of Scotland) in order to reduce distribution charges made to consumers in that area.

2. Do you agree that the Hydro Benefit Replacement Scheme and Common Tariff Obligation remain operationally effective and should be retained?

# 3. Delivering the Shetland cross-subsidy

This section seeks views on the way in which Government proposes to spread the costs of the Shetland cross-subsidy across licensed suppliers in Great Britain through the Hydro Benefit Replacement Scheme.

## Rationale for GB-wide funding

As set out in Section 1, the higher costs that are driven by the isolated nature of Shetland's energy infrastructure mean that a cross-subsidy arrangement operates in order to avoid Shetland consumers facing higher electricity prices than consumers in the rest of the North of Scotland. This cross-subsidy is currently funded by consumers across the North of Scotland through electricity distribution charges.

Lerwick Power Station is vital to Shetland's electricity distribution arrangements, but is reaching the end of its operational life. This means that a new energy solution is needed to maintain Shetland's security of supply. Any new energy solution can be expected to increase Shetland electricity costs, resulting in an additional burden to North of Scotland consumers if the existing cost-recovery arrangement continues.

In light of this expected rise in costs, the Government confirmed in March 2015 that the full costs of the Shetland cross-subsidy would be spread across GB once the new energy solution is implemented. In July 2016, Government confirmed that this cross-subsidy arrangement would be delivered through the Hydro Benefit Replacement Scheme, as this provides an efficient and transparent approach.

Ofgem has recently concluded that the most cost-effective approach in the near-term will be to implement an interim solution which involves extending the operation of Lerwick Power Station through targeted investment until at least 2024/25. Whilst the costs of this interim energy solution are expected to be less than for the eventual full new energy solution, the interim solution is still likely to increase distribution costs for consumers in the North of Scotland. The Government therefore takes the view that the interim solution falls within the scope of its commitment to spread the costs of the Shetland cross-subsidy across GB.

As noted in Section 2, the Government is proposing that the existing assistance amount provided for North of Scotland consumers through the Hydro Benefit Replacement Scheme will continue, and is not affected by these proposals for the Shetland cross-subsidy.

## Design of the proposals

#### Aims

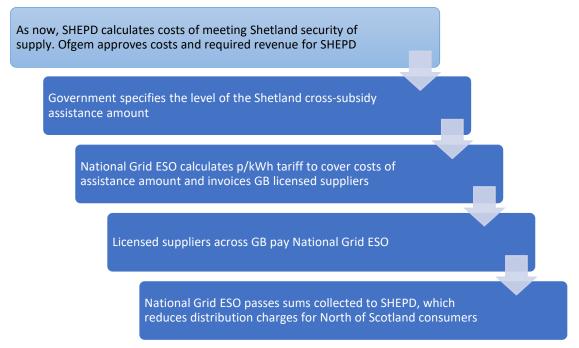
In designing the arrangements for GB-wide funding of the Shetland cross-subsidy, the Government is seeking to establish a predictable, transparent framework for fixing the charge at the appropriate level. This predictability is particularly relevant so that electricity suppliers can anticipate and plan for any changes to the levels of charge they will incur. Efficient and effective operation of the arrangements is also important, which the Government believes is

best achieved by following the current arrangements for the Hydro Benefit Replacement Scheme as far as possible. This is a well-tested process which relevant parties understand.

#### Flow of assistance relating to the Shetland cross-subsidy

As with the existing arrangements for the Hydro Benefit Replacement Scheme, the assistance amount to cover the costs of the Shetland cross-subsidy (referred to in this consultation document as the 'Shetland cross-subsidy assistance amount') would be collected by National Grid ESO from all licensed suppliers across GB, and then passed to SHEPD in order to reduce its distribution use of system charges to suppliers in the North of Scotland. In turn, these reduced charges are reflected in the electricity bills paid by consumers in the North of Scotland. Figure 1 below summarises the flow of assistance, with more detail set out in the remainder of this chapter.

# Figure 1: Flow of assistance for the Shetland cross-subsidy – the first element on the costs of Shetland's security of supply is out of scope of this consultation



#### Specifying the level of the Shetland cross-subsidy and the assistance amount

It is for Ofgem to approve the level of Shetland related costs that SHEPD is able to recover from distribution charges paid in the North of Scotland (i.e. the total cost of the Shetland crosssubsidy). In doing so, Ofgem ensures that these costs represent value for money for consumers. Further information on this process is set out at Annex B and in Ofgem's decision document on costs associated with Shetland. This shows that for 2020/21, which is the first year that the proposed order would take effect, the estimated value of the Shetland crosssubsidy is £27 million in nominal terms. Government understands that a similar value is anticipated for future years during which the interim Shetland solution is in place.

To help ensure future predictability of charging levels for all interested parties and an efficient approach to administering the arrangements, we are proposing that, in the first year that the Shetland cross-subsidy element of the Hydro Benefit Replacement Scheme operates (2020/21), the assistance amount to cover the cost of the cross-subsidy will be fixed at £27 million. For the subsequent two years until the scheme is next reviewed, we are proposing that

the previous year's Shetland cross-subsidy assistance amount would be indexed in line with the RPI.

We recognise there is a risk that, from year to year, the specified value for the Shetland crosssubsidy assistance amount (which is what Government is setting here) may differ from the actual level of the Shetland cross-subsidy paid by suppliers in the North of Scotland to Shetland (which remains a matter for SHEPD and Ofgem). In turn, this would mean that the sums recovered from GB suppliers could either under or over recover the sums paid by suppliers in the North of Scotland for the Shetland cross-subsidy. However, since the level of the Shetland cross-subsidy is likely to be relatively stable in the near-term, the risk of any significant difference is minimal. On balance, we therefore believe that the benefits of predictability and efficient administration of the new arrangement may be expected to outweigh the risks of differences in the amounts paid by and to suppliers in the North of Scotland in relation to the Shetland cross-subsidy.

For the avoidance of doubt, the Government's proposals will not change the actual level of the Shetland cross-subsidy, which will continue to be a matter for SHEPD and Ofgem and is not set by Government.

#### Calculation of tariff for the Shetland cross-subsidy assistance amount

GB-wide funding for the Shetland cross-subsidy would be implemented by an order (a type of statutory instrument) amending the order establishing the Hydro Benefit Replacement Scheme. Specifically, the proposed order would extend licence conditions applying to National Grid ESO, electricity suppliers and SHEPD as the relevant distributor.

The proposed order would extend National Grid ESO's obligations under its transmission licence to include:

- Calculating a price per kilowatt-hour (p/kWh) tariff each year to cover the total cost of the Shetland cross-subsidy assistance amount. National Grid ESO does this by dividing the total Shetland cross-subsidy assistance amount by a reasonable forecast of the total units of electricity to be supplied within Great Britain during the relevant year.
- Invoicing licensed suppliers across GB for the amount determined by applying this p/kWh tariff to the amount of electricity supplied by each supplier for the relevant year. Payment terms, including invoicing dates, would be the same as currently apply for the Scheme. This involves collection of the total amount through four payments made by suppliers during the course of the year.
- Detailing in its annual scheme statement (referred to above in Section 2) the p/kWh tariff that will apply for the Shetland cross-subsidy assistance amount.
- Passing the sums collected from GB licensed suppliers to SHEPD, as the electricity distributor for the North of Scotland.
- Applying a correction amount for the next year, which would be the difference between the total Shetland cross-subsidy assistance amount that was intended to be recovered through the p/kWh charge in the previous year and the amount that was actually recovered in that year.

National Grid ESO's proposed new obligations in relation to the Shetland cross-subsidy assistance amount would be largely the same as those under the existing scheme. Hence the Government believes that the allowance which National Grid ESO currently receives to cover

its costs for administering the scheme should not be increased in order to administer this additional element.

The proposed order would also extend licence conditions: in respect of GB licensed suppliers, to pay to National Grid ESO the p/kWh tariff for the Shetland cross-subsidy; and in respect of SHEPD, to apply the benefit of this payment to reduce the distribution use of system charges to suppliers in the North of Scotland in a non-discriminatory way.

#### Wider aspects

To confirm, the existing assistance amount provided under the Hydro Benefit Replacement Scheme (i.e. £61 million in 2018/19) will continue, with an additional amount relating to the Shetland cross-subsidy also collected through the scheme. This means that the total assistance provided by GB electricity consumers to those consumers in the North of Scotland under the Hydro Benefit Replacement Scheme would be in the region of £90 million in 2020/21 (i.e. the existing assistance amount plus £27 million for the Shetland cross-subsidy assistance amount). To ensure transparency, these two amounts will be separately defined in the proposed order and in the invoices issued by National Grid ESO to GB suppliers.

Ofgem currently takes account of the Hydro Benefit Replacement Scheme in setting the level of the default retail tariff cap, and the expectation is that this will continue after the proposed Shetland cross-subsidy assistance amount is included. We are working with Ofgem to ensure the additional cost to suppliers of this element will be appropriately incorporated for the summer 2020 cap period.

#### Timing and next steps

Subject to the outcome of this consultation and amendments being made to the Energy Act 2004 (Assistance for Areas with High Distribution Costs) Order 2005, the new arrangement for introducing the Shetland cross-subsidy assistance amount is proposed to take effect from April 2020, which is the earliest practical date at which the necessary measures can be implemented.

The intention is that this new arrangement would continue in the proposed form for as long as the Shetland interim solution is in place, which could be until at least 2024/25. However, the statutory requirement to review the Hydro Benefit Replacement Scheme every three years means there will be an opportunity in 2022 to assess the effectiveness of the arrangement after a suitable period of operation. This will include consideration of whether the correct sum of money has been and is being recovered to cover the costs of the Shetland cross-subsidy.

#### **Consultation questions**

- 3. Do you agree that the Hydro Benefit Replacement Scheme is the most appropriate way to deliver revised funding arrangements for the Shetland cross-subsidy? If not, why not and what other mechanism(s) should be considered?
- 4. Do you agree that the proposed design of the revised funding arrangements for the Shetland cross-subsidy is likely to be effective? If not, what changes or additions should be made?

5. Does the proposed design of the revised funding arrangements for the Shetland cross-subsidy achieve predictability of charges, transparency and efficiency of operation? Are there other important aspects that should be taken into account?

# 4. Catalogue of consultation questions

#### **Consultation questions**

- 1. Do you agree that the policy objectives of the Hydro Benefit Replacement Scheme and Common Tariff Obligation – which are focused on ensuring that consumers in the North of Scotland are not unreasonably disadvantaged by the price differential in electricity distribution costs – remain valid?
- 2. Do you agree that the Hydro Benefit Replacement Scheme and Common Tariff Obligation remain operationally effective and should be retained?
- 3. Do you agree that the Hydro Benefit Replacement Scheme is the most appropriate way to deliver revised funding arrangements for the Shetland cross-subsidy? If not, why not and what other mechanism(s) should be considered?
- 4. Do you agree that the proposed design of the revised funding arrangements for the Shetland cross-subsidy is likely to be effective? If not, what changes or additions should be made?
- 5. Does the proposed design of the revised funding arrangements for the Shetland cross-subsidy achieve predictability of charges, transparency and efficiency of operation? Are there other important aspects that should be taken into account?

# Annex A: Background to the schemes

There are three complementary Government measures that ensure consumers in the North of Scotland do not bear an unreasonable burden of the high electricity distribution costs that inevitably arise in this area.

### Hydro Benefit Replacement Scheme

The aim of the Hydro Benefit Replacement Scheme is to protect consumers in the North of Scotland from very high electricity distribution charges.

The scheme was established in the 1940s, on the basis that the high costs of providing power to remote Scottish Highlands and Islands consumers should be offset to some extent by the relatively low running costs of small hydro stations and dams located in the north west of Scotland. The scheme was unique in that Northern Scotland was the only area where cross-subsidy of this sort was explicitly allowed. It was formalised on the privatisation of the Scottish electricity industry in the 1990s.

It took its current form on 1 April 2005 under the Energy Act 2004 (Assistance for Areas with High Distribution Costs) Order 2005, made under section 184 of the Energy Act 2004 which allows the Secretary of State to establish schemes to require authorised transmission licence holders to make a payment to distributors serving a specified area where distribution costs are significantly higher (when calculated on a per customer basis) than in other areas of Great Britain. The payment must be passed from the relevant distributors to licensed suppliers within the area, through reduced use of system charges. The scheme must be funded by charges on licensed suppliers across Great Britain.

The Hydro Benefit Replacement Scheme is administered by the Electricity System Operator, which is National Grid Electricity System Operator (ESO). National Grid ESO has a licence condition that obliges it to collect the assistance amount from licensed suppliers across Great Britain and pass it on to the relevant distributor for the North of Scotland to reduce distribution costs in that geographic area (Scottish Hydro Electric Power Distribution). The assistance amount is recovered from licensed suppliers based on the total amount of electricity they supply to their customers.

In 2018/19 the assistance amount totals some £61m which includes a small payment to National Grid ESO to cover the costs of administering the scheme<sup>12</sup>. Ofgem estimates that this assistance equates to an average bill reduction of around £40 a year to the 698,000 domestic consumers in the North of Scotland, with the remainder of the assistance enabling bill savings for the 76,000 non-domestic consumers in this region. The average cost of this assistance for each GB domestic consumer is less than £1 per year.

<sup>&</sup>lt;sup>12</sup> National Grid Charging Statement available at: <u>https://www.nationalgrideso.com/charging/assistance-areas-high-electricity-distribution-costs-aahedc</u>

# **Common Tariff Obligation**

The Common Tariff Obligation prohibits suppliers from charging comparable consumers different prices or offering different contractual terms on the basis of their location in the North of Scotland. It only covers domestic consumers, not non-domestic consumers. Suppliers can offer different terms to consumers, provided they ensure that these differences are not determined on the basis of the customers' geographical location within the North of Scotland. Similarly, it prohibits the holders of transmission and distribution licences from charging suppliers of domestic premises different prices on the basis of geographic location in the North of Scotland.

It has the same geographic extent as the Hydro Benefit Replacement Scheme.

The Common Tariff Obligation became law under the Electricity Act 1989 (Uniform Prices in the North of Scotland) Order 2005, which was made under an enabling power in Section 7B of the Electricity Act 1989.

## Shetland cross-subsidy

Shetland is in a unique position in that it is not connected to the GB electricity grid and only has a local distribution network. Local generation is required to meet all electricity demand, which leads to high average costs of electricity supply. This means there is good justification for providing support to Shetland consumers.

Consumers on Shetland benefit from a cross-subsidy arrangement which prevents price differentiation in electricity supply prices across the North of Scotland on the basis of location. The resulting costs are currently spread across all suppliers in the North of Scotland, and ultimately all consumers in the North of Scotland, through electricity distribution charges.

The cross-subsidy arrangement for domestic consumers on Shetland is underpinned by the Common Tariff Obligation, and Government put in place a Secretary of State direction to enable continuation of this arrangement for existing non-domestic consumers from April 2015 onwards. At the same time, the Government enabled the cross-subsidy to apply to future non-domestic connections on Shetland with a maximum demand capacity of 2 mega watts at any one site.

SHEPD's Licence Condition sets out a formula for calculating the level of subsidy, which is based on the overall costs of the electricity system for Shetland minus income received from suppliers. An efficiency incentive is applied to those elements under SHEPD's direct control. SHEPD reports the value of the subsidy annually to Ofgem. The reported values are subject to an independent audit check and review by Ofgem. In 2017/18, the total cross subsidy amounted to £18.69 million<sup>13</sup>, which ensured electricity prices on Shetland were in line with those in the North of Scotland.

<sup>13</sup> Source: Ofgem

# Annex B: Distribution charges by region

Ofgem publishes the following regional estimate of electricity distribution network charges for households<sup>14</sup>. It is based on a typical electricity consumption of 3,100 kWh for single rate households.

This estimate includes the positive impact of the Hydro Benefit Replacement Scheme in reducing electricity distribution charges in the North of Scotland. Without the scheme, it is clear that the North of Scotland would have significantly higher charges than any other region.

Table: Regional estimates of typical GB customer cost (£ Real (2017-18 price base) per
typical domestic customer)

Region	Apr-14	Apr-15	Apr-16	Apr-17	Apr-18	Apr-19
North West	101	94	96	79	78	82
North East	104	103	101	91	85	88
Yorkshire	87	89	83	76	73	73
Midlands	81	84	96	83	80	78
East Midlands	76	80	86	76	71	71
South Wales	117	102	116	102	98	99
South West	118	113	126	113	100	97
London	80	70	79	67	65	71
South East	96	91	107	91	81	87
East Anglia	79	81	82	79	76	78
South Scotland	89	102	99	91	91	92
Merseyside & N Wales	136	128	112	104	99	110
North Scotland	140	130	142	125	123	121
Southern	85	85	90	81	74	71
GB weighted average	94	96	101	90	85	87

<sup>&</sup>lt;sup>14</sup> <u>https://www.ofgem.gov.uk/publications-and-updates/riio-electricity-distribution-annual-report-2017-18</u>

# Annex C: Process of calculating and collecting the Shetland cross-subsidy via the Hydro Benefit Replacement Scheme

The proposed process for calculating the total cost of the Shetland cross-subsidy, and collecting the appropriate assistance amount via the Hydro Benefit Replacement Scheme, is as follows:

- 1. SHEPD estimates the annual distribution cost of implementing the Shetland interim solution for the years 2020/21, 2021/22 and 2022/23.
- 2. Ofgem reviews and approves the SHEPD estimates for the relevant year<sup>15</sup>.
- Ofgem calculates the increase in allowed revenue<sup>16</sup> for SHEPD's distribution costs for implementing the Shetland interim solution using its Price Control Financial Model (PCFM) for the relevant year.
- 4. BEIS to determine the level of assistance amount to cover the costs of the Shetland cross-subsidy in 2020/21, based on the allowed revenue for SHEPD for that year. The level of the assistance amount will be specified in legislation (the order underpinning the Hydro Benefit Replacement Scheme), and adjusted by RPI for subsequent years.
- 5. Based on the level of subsidy set for the relevant year, National Grid Electricity System Operator (ESO) to calculate in p/kWh the level of charge to be levied on licensed GB suppliers in the relevant year, collect this from suppliers and pass this amount on to SHEPD. SHEPD to use this amount to reduce distribution charges for North of Scotland suppliers.
- 6. For the next year, National Grid ESO to calculate and apply a correction amount which would be the difference between the total Shetland cross-subsidy assistance amount that was intended to be recovered through the p/kWh charge in the previous year and the amount that was actually recovered in that year.

<sup>&</sup>lt;sup>15</sup> For the purpose of the Shetland interim solution, the figures from steps (2) and (3) above will be the same. Normally, the figures would be different due to the capitalisation of costs in the SHEPD regulatory asset base (RAB). The RAB is a mechanism used by Ofgem in its Price Control Financial Model to calculate the allowed return for each network company.

<sup>&</sup>lt;sup>16</sup> For the purpose of the Shetland interim solution, Ofgem and SHEPD have agreed not to capitalise any of the costs, i.e. all relevant costs will flow directly into allowed revenues each year rather than being added to the RAB. Ofgem and SHEPD considered this to be a more appropriate way of recovering the costs of the Shetland interim solution as it avoids future customers paying for costs which are incurred in supplying to customers today.

This consultation is available from: <a href="http://www.gov.uk/government/consultations/hydro-benefit-replacement-scheme-and-common-tariff-obligation">www.gov.uk/government/consultations/hydro-benefit-replacement-scheme-and-common-tariff-obligation</a>

If you need a version of this document in a more accessible format, please email <u>enquiries@beis.gov.uk</u>. Please tell us what format you need. It will help us if you say what assistive technology you use.