



Department
of Energy &
Climate Change

Support for non-domestic electricity consumers on Shetland

July 2014

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Any enquiries regarding this publication should be sent to us at shetlandsubsidy@decc.gsi.gov.uk.

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General information

The purpose of this consultation is to seek stakeholder views on DECC's proposals for continuation of cross-subsidy arrangements for non-domestic consumers on Shetland. DECC previously confirmed that cross-subsidy arrangements for domestic consumers would continue.

Issued: 24th July 2014

Respond by: 21st August 2014

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Consultation reference: URN 14D/278

Territorial extent:

Great Britain.

How to respond:

Please respond to this consultation via email to shetlandsubsidy@decc.gsi.gov.uk.

Alternatively, hard copy responses should be sent to the above address.

Additional copies:

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Confidentiality and data protection

Information provided in response to this consultation, including personal information, may be subject to publication or disclosure in accordance with the access to information legislation (primarily the Freedom of Information Act 2000, the Data Protection Act 1998 and the Environmental Information Regulations 2004).

If you want information that you provide to be treated as confidential please say so clearly in writing when you send your response to the consultation. It would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded by us as a confidentiality request.

We will summarise all responses and place this summary on our website at <https://www.gov.uk/government/publications>. This summary will include a list of names of organisations that responded but not people's personal names, addresses or other contact details.

Quality assurance

This consultation is carried out in accordance with the Government's Consultation Principles, which can be found here:

<https://www.gov.uk/government/publications/consultation-principles-guidance>

If you have any complaints about the consultation process (as opposed to comments about the issues which are the subject of the consultation) please address them to:

DECC Consultation Co-ordinator

3 Whitehall Place, London, SW1A 2AW

Email: consultation.coordinator@decc.gsi.gov.uk

Executive Summary

1. Shetland is isolated from the GB mainland and has the only licensed distribution system that is not connected to the wider GB electricity network. The isolated nature of its electricity infrastructure means that costs are significantly higher than the rest of northern Scotland.
2. Domestic and non-domestic consumers on Shetland currently benefit from a cross-subsidy arrangement which prevents the distinction of electricity supply prices across northern Scotland. DECC's policy is to protect consumers in Shetland from the high costs they would otherwise face.
3. The value of the cross-subsidy in 2012/13 was £26.6m (£14m for domestic and £12.6m for non-domestic consumers). This amount is recovered from all 760,000 consumers in the Scottish Hydro Electric Power Distribution (SHEPD) area covering northern Scotland at an annual average cost in 2012/13 of approximately £19 per domestic consumer, £164 for small businesses, £558 for medium businesses and £5,051 for large businesses.
4. Government understands that replacement of the ageing Lerwick Power Station, which is a key source of generation on Shetland, is needed by around 2018 in order to maintain security of supply. This is expected to further increase Shetland's electricity costs. Ofgem is working with SHEPD to minimise those costs.
5. There are concerns that the anticipated increased costs of electricity could result in a level of cross-subsidy for Shetland that would place too great a burden if recovered from northern Scotland consumers only.
6. Through a review¹ of the Common Tariff Obligation (CTO) last year, DECC has already confirmed that *domestic consumers* should continue to be protected. The consultation set out below proposes how *non-domestic consumers* on Shetland should continue to receive the cross-subsidy and the method of cost recovery for

¹ <https://www.gov.uk/government/consultations/hydro-benefit-replacement-scheme-and-common-tariff-obligation-three-year-review-of-statutory-schemes-call-for-comments>

both domestic and non-domestic elements of the cross-subsidy in light of future increased costs.

7. **DECC proposes to continue the cross-subsidy for all existing non-domestic electricity consumers on Shetland (as well as all domestic electricity consumers on Shetland). It would also continue for future non-domestic consumers with a maximum demand connection of 2MW. Costs would be recovered from all GB electricity consumers as soon as a new integrated energy solution for Shetland has been implemented in around 2018. Until then, costs would continue to be recovered from all SHEPD electricity consumers.**

Next steps

8. We will aim to publish our decisions as soon as possible after the consultation closes on 21st August 2014, following careful consideration of responses and evidence received.
9. Subject to this consultation, we intend to implement our decision by issuing a Direction to SHEPD setting out the treatment of non-domestic consumers on Shetland. Where necessary, changes to the Special Licence Conditions would take place following the policy decision.

Context

The problem

10. Shetland is isolated from the GB mainland with no electricity link or natural gas network. Local generation is required to meet all electricity demand. This small internal market combined with high generation costs means electricity prices will tend to be high. This means there is good justification for providing support to consumers there in form of a cross-subsidy.
11. The electricity cross-subsidy arrangement for all consumers on Shetland amounted to the value of £26.6m in 2012/13. Without this subsidy, the price of electricity on Shetland would be around 75% higher than the price of that on the mainland. The cross-subsidy arrangement brings prices on Shetland into line with those in northern Scotland.
12. In line with the end of Ofgem's current Price Control Period (April 2010 to March 2015) the current cross-subsidy arrangement for non-domestic consumers on Shetland will fall away in April 2015. Without a continuation, electricity costs would be significantly higher and would result in a possible competitive disadvantage for businesses on Shetland compared to businesses located on mainland GB and reduced household welfare compared with residents in mainland GB.
13. The ageing Lerwick Power Station on Shetland currently supplies around 50% of Shetland demand. By the end of 2016, most of the nine diesel units will exceed their original design life and by 2018 the risks to security of supply and environmental issues become material. Government understands a new energy solution for Shetland is needed by 2018. To ensure that the costs of supply on Shetland are efficient and economic, it is necessary to seek a full energy solution on Shetland which includes, but is not limited to, smart grid solutions incorporating renewables, demand side management and innovative solutions.
14. Also, Lerwick Power Station is currently approaching the maximum demand that it is currently able to generate for. This sets a limit to the extent of new demand connections which can be accommodated on Shetland. The energy solution for Shetland could be sized to allow for future consumer connection growth on Shetland.

15. To minimise these costs, SHEPD, along with an independent auditor and supported by Ofgem, will hold a competitive tender in autumn 2014 to identify the most efficient integrated energy solution for Shetland. Even with an efficient energy solution, replacement costs will significantly increase the level of cross-subsidy needed.
16. DECC confirmed, as part of its recent review that the CTO should remain in place for all domestic consumers in the north of Scotland including Shetland. The main issue addressed by this consultation is whether to continue cross-subsidisation of non-domestic consumers on Shetland following the end of the current Ofgem Price Control Period.

Rationale for DECC intervention

17. The current cross-subsidy arrangements for non-domestic consumers on Shetland will fall away in April 2015. This could result in significant increase in Shetland electricity bills. Without DECC action, only domestic electricity consumers in Shetland would continue to receive a cross-subsidy.
18. In addition, the new power solution on Shetland due in approximately 2018 will result in material additional costs for non-domestic consumers on Shetland increasing the level of cross-subsidy needed.
19. Without the cross-subsidy, there are concerns that businesses on Shetland would not be competitive compared to their counterparts in the rest of northern Scotland. This is likely to adversely affect the economy of Shetland.
20. This consultation focuses on whether arrangements for non-domestic consumers should continue in their current form, or be changed in some way. The objective is to protect those non-domestic consumers on Shetland who would be very unlikely to find it feasible to make alternative electricity supply arrangements and to deliver that protection at least cost to all consumers.
21. As the independent energy regulator, Ofgem is responsible for overseeing the setting of distribution and transmission charges for GB. It does so following the principle that charges should reflect the cost each user places on the networks. This approach ensures the efficient build and operation of networks and keeps down overall costs to the consumer in line with Ofgem's primary objective. When a need arises to act in a way that is counter to this principle in the interest of wider social objectives, it is for Government to take forward. The question of whether non-domestic consumers on

Shetland should receive a cross-subsidy is just such a wider social matter, and therefore falls to Government to resolve, rather than Ofgem. It follows that Government would need to direct a change to SHEPD's licence conditions, which is the proposed approach set out in the Impact Assessment.

Current value of cross-subsidy to Shetland

22. The current cross-subsidy which covers both domestic and non-domestic consumers ensures that electricity prices on Shetland are equivalent to what consumers pay in northern Scotland. Table 1 shows the value of this cross-subsidy over 2012/2013 to consumers on Shetland. The cross-subsidy costs are currently recovered from all 760,000 consumers in SHEPD's distribution area, which covers northern Scotland.

Table 1: Value of current cross-subsidy to all Shetland consumers based on actual 2012/2013 demand figures (in 12/13 prices)

Consumer type (Average annual power consumption)¹	Ave. annual value of subsidy per Shetland consumer	Type of consumers
Domestic Consumers (5.2MWh)	£1,200	Households
Small non-domestics (48MWh)	£5,800	Farm, waste treatment works, cinema, B&B
Medium non-domestics (163MWh)	£20,000	Hotel, Schools, Airport, Ferry Terminal, Hospital
Large non-domestics (1,477MWh)	£180,000	Fishery, Facilities Management
Total	£26.6m	

1. *Explanation of average annual power consumption figures presented in the impact assessment associated with this consultation*

Note: Figures presented are an approximation based on the average cross-subsidy received by consumers on Shetland.

23. Without extension of the cross-subsidy arrangement the price of electricity for consumers on Shetland would be around 75% higher than that in the rest of northern Scotland. This difference would be even higher when the cost of the full energy solution starts to be recovered from approximately 2018.

24. An additional factor DECC has taken into consideration is the relatively high level of fuel poverty in northern Scotland. We estimate that fuel poverty in northern Scotland is around 32%², compared to 27.1% in Scotland as a whole³. Total fuel poverty for

² <http://www.scotland.gov.uk/Topics/Statistics/SHCS/LAtables2012>

England is 11%⁴ and 30%⁵ for Wales. We have therefore considered the impact on those paying the cross-subsidy as well as those receiving it.

25. There is a balance to be struck between limiting the increase in supply costs for consumers on Shetland with the linked effect of increasing bills for all consumers in northern Scotland. Therefore this consultation also considers what the appropriate consumer base for the costs of the cross subsidy should be from 2018.

³ <http://www.scotland.gov.uk/Resource/0043/00439879.pdf>

⁴ <https://www.gov.uk/government/publications/fuel-poverty-report-updated-august-2013>

⁵ <http://wales.gov.uk/docs/caecd/research/130430-wales-fuel-poverty-projection-tool-2011-12-report-en.pdf>

Proposals

26. We have explored a range of policy options for non-domestic consumers on Shetland. There are two key advantages of the proposed solution (detailed in this section). Firstly, it limits the risk that the establishment of future larger non-domestic consumers will significantly increase the cross-subsidy cost. Secondly, it offers consistency/fairness of support between current and future non-domestic consumers on Shetland. In-depth analysis of this policy solution is provided in the impact assessment published alongside this consultation document.
27. The policy objective is to limit any competitive disadvantage for small to medium non-domestic electricity consumers on Shetland who would be unlikely to find a cost effective alternative (e.g. in the form of their own generation assets) to the higher costs of electricity supplies in Shetland. The policy should not distort competition, should be non-discriminatory and proportionate, and at the least cost for all consumers.

Non-domestic consumers to benefit from the Shetland cross-subsidy

28. DECC proposes continuing the current cross-subsidy arrangements for all current Shetland non-domestic consumers while limiting the cross-subsidy for future non-domestic consumers to 2MW. The limit would also apply to existing non-domestic consumers that seek a new connection larger than 2MW.
29. Current non-domestic consumers' connection agreements on Shetland are based on expected demand over the lifetime of that connection. A limit of a 2 MW connection would accommodate further growth for the majority of existing businesses on Shetland. Also, this 2MW limit would provide plenty of room for new customers to grow in size, while also limiting the growth of the cross-subsidy overall and encouraging new and growing non-domestic consumers to optimise their energy use. Larger consumers on Shetland should be able to source more competitively priced electricity supply contracts independently or self-generate in a way that a small non-domestic consumer would not be able to.

30. The basis for the 2MW limit on non-domestic consumers would be on a consumer's maximum connection agreement. This allows for ease of implementation clarity and transparency regarding which consumer will receive the cross-subsidy making it work for the consumer and the supplier. We did consider an alternative where the cross-subsidy threshold is based on actual demand use but concluded this would pose considerable administration challenges for the distribution networks operator and complex management/calculation of charges for the consumer.
31. Overall, the proposal presented in this consultation provides continuity for existing non-domestic consumers on Shetland while also offering protection for future consumers at a reasonable level of demand.

Consultation Questions - Who should benefit from the Shetland non-domestic cross-subsidy?

1.	Do you agree that all existing non-domestic demand consumers on Shetland should continue to receive the cross-subsidy? If not, do you have reasons why all existing non-domestic consumers should not continue to receive the cross-subsidy?
2.	Should a capacity limit be applied to future non-domestic consumers able to receive the cross-subsidy?
3.	If a capacity limit is applied to future non-domestic consumers, do you agree that this should be set at a maximum demand connection agreement of 2MW? If not, what alternative level for a maximum demand connection agreement would you suggest? And for what reasons?

Shetland cross-subsidy cost recovery

32. Currently the cross-subsidy is recovered across 760, 000 SHEPD consumers. With the implementation of a full energy solution for Shetland the cost of the cross-subsidy is expected to rise significantly. Given the percentage of consumers in northern Scotland in fuel poverty, DECC has considered the feasibility of continuing the current arrangements and whether it would be appropriate to spread the costs of a future, higher, cross-subsidy across a larger consumer base.
33. DECC proposes a “Two Stage” approach where the current cost recovery mechanism (across all SHEPD’s consumers) is maintained in its current form in the short term. In the long term, once the full integrated energy solution for Shetland takes effect, the cost recovery would be socialised across GB. This would reduce the increased burden on SHEPD’s consumers, at minimal cost to the larger all-GB consumer base. We estimate that GB consumers would see an average bill increase of up to £1 per year over the 2018/2019 – 2042/43 period. Further detail analysis is presented in the impact assessment (IA) associated with this consultation.
34. This approach maintains the integrity of the current approach (before costs rise to unsustainable levels within northern Scotland) while allowing the detail of how the cross-subsidy is socialised over GB to be decided once there is more certainty over cost (and providing more time to find cost-saving solutions). It also allows time for National Grid licence changes and new processes to be developed to implement a socialised approach.
35. DECC is aware that the cross-subsidy may have a moderate cost impact on small and micro non-domestic consumers in GB from 2018/19 onwards, and will consider as part of the final policy decision whether it is possible to mitigate these costs in some way. DECC would welcome views on this aspect in response to the policy proposed.
36. With regard to certainty of cost, figures provided by SHEPD and Ofgem underpin the analysis for this consultation. Our expectation is that SHEPD’s competitive tender process in autumn 2014 should reduce these future cost estimates. Moreover, we expect the enduring solution for Shetland to recognise the value of energy efficiency and the solution must consider appropriate incentives for all parties including consumers who could implement effective energy efficiency measures. This would

contribute to a lower overall energy consumption on the island which has the potential to lower the cost of the cross subsidy.

37. Consideration is also being given to the construction of a HVDC link to the island which could further reduce supply costs on Shetland⁶. A link is being considered in the context of the proposed Viking wind farm, however, it will not be operational before 2019 at the earliest. A Two-Stage approach also allows time for National Grid licence changes and new processes to be developed to implement a socialised approach.
38. Therefore figures presented in this consultation document are likely to be at the highest level of cost consumers may face. An accurate assessment of final costs will only be possible once SHEPD's competitive tender process is concluded.
39. Figures presented in the IA cover cost recovery for the total cross-subsidy for both domestic and non-domestic consumers on Shetland. To minimise administration costs, DECC would not intend making a distinction between cost recovery routes arising from domestic and non-domestic consumers on Shetland. Administration costs arise from the need to manage the cross-subsidy and costs to suppliers recovering these costs through their consumer base. We assume National Grid is best placed to administer any scheme as they currently administer similar schemes such as the Hydro Benefit Replacement Scheme (HBRS). Based on the current costs for administering the comparable HBRS⁷, we estimate the costs to be c£100k/annum plus some implementation costs. Following the approach taken with the HBRS, the cross-subsidy costs could be recovered through the Transmission Network Use of System charges paid by licensed electricity supply companies across GB. This solution would require a licence modification for National Grid and SHEPD.
40. In summary, a "Two-Stage" cost recovery plan would provide certainty of arrangements for non-domestic consumers in the short and medium term while sending a clear signal that higher costs in the future would be socialised across GB,

⁶ A link to the mainland will not negate the need for a new energy solution since the link will not be operational all of the time, either due to planned maintenance, or unplanned outages. The energy solution must therefore be sized to serve the demand when the link is unavailable. However, the link would reduce reliance on the energy solution most of the time, giving access to cheaper sources of energy should appropriate commercial arrangements be made.

⁷ Information on National Grid's administration of the Hydro Benefit Replacement Scheme is set out in its latest charging statement for the scheme: <http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=7440>

protecting Shetland consumers when considerable costs associated with a full energy solution for Shetland are incurred.

Consultation Questions - Shetland non-domestic consumers' cross-subsidy cost recovery method	
4.	Do you agree that a “Two Stage” approach is preferable because it enables the long-term arrangements to be finalised while ensuring continuity in the current subsidy arrangements?
5.	Do you agree that, under the proposed “Two Stage” approach to cost recovery, once the costs for a full energy solution for Shetland take effect, the cross-subsidy costs should be socialised across all GB consumers?
6.	Should the potential impact on small businesses across GB from socialising the cross-subsidy be mitigated in some way? If so, how might this be done?

Review Period

41. We propose to re-evaluate the cross-subsidy arrangements in 2023 to coincide with Ofgem’s next electricity distribution price control review. We would expect a key consideration for re-evaluation to be a substantial change in relevant circumstances with a potential to impact on the electricity supply arrangements on Shetland. We would not expect to re-evaluate the arrangements ahead of that price control review unless circumstances related to the energy supply arrangement on Shetland change materially.

Consultation Questions	
7.	Do you agree with DECC’s proposed review period?

Summary Consultation Questions

Consultation Questions	
1.	Do you agree that all existing non-domestic demand consumers on Shetland should continue to receive the cross-subsidy? If not, do you have reasons why all existing non-domestic consumers should not continue to receive the cross-subsidy?
2.	Should a capacity limit be applied to future non-domestic consumers able to receive the cross-subsidy?
3.	If a capacity limit is applied to future non-domestic consumers, do you agree that this should be set at a maximum demand connection agreement of 2MW? If not, what alternative level for a maximum demand connection agreement would you suggest? And for what reasons?
4.	Do you agree that a “Two Stage” approach is preferable because it enables the long-term arrangements to be finalised while ensuring continuity in the current subsidy arrangements?
5.	Do you agree that, under the proposed “Two Stage” approach to cost recovery, once the costs for a full energy solution for Shetland take effect, the cross-subsidy costs should be socialised across all GB consumers?
6.	Should the potential impact on small businesses across GB from socialising the cross-subsidy be mitigated in some way? If so, how might this be done?
7.	Do you agree with DECC’s proposed review period?

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