



## Consultation on principles to be considered when recovering the costs of providing ‘flexible connections’

*Northern Powergrid’s response to Ofgem’s consultation to seek views on a number of policy issues brought to light by SSEN’s proposed modifications to their Statement of Methodology and Charges for Connection.*

### KEY POINTS

- While we support the principles behind Scottish and Southern Electricity Networks’ (SSEN’s) proposed approach, we believe there are flaws that need to be addressed in the proposed modification. The intention is to harmonise treatment between generation and demand customers but we consider that the proposal introduces inconsistencies between how DNOs charge for operation and maintenance services across these customer groups. This needs careful consideration in parallel to the Ofgem-led work on Charging Futures and the Targeted Charging Review.
- The use of new technology and new commercial terms means that smarter more flexible connections are now the Minimum Scheme in generation rich areas of the network.
  - We would expect flexible connections that result in lower connections costs to normally be the Minimum Scheme (i.e. the connection is least cost and technically standard).
  - If Ofgem considers that flexible connections are not part of the Minimum Scheme definition then there may be a case to reconsider the definition itself.
- If part of a Minimum Scheme, the operations and maintenance costs should be socialised across all customers.
  - This is consistent with all other customer types. For example, demand customers are not charged for the costs to repair the service cable to their property when only they will benefit from it being remedied.
  - Whether the services are provided by third parties or not is irrelevant.
- If a scheme is over and above the Minimum Scheme then there needs to be a consideration of the benefits and to whom they fall. If the benefits only fall to one customer or a group of customers then it is appropriate that they are charged for the operations and maintenance costs.
- We are currently rolling out our fourth Active Network Management (ANM) zone. Our approach for the latest development differs to that proposed by SSEN on the recovery of ongoing third party support costs for ANM schemes. Our policy is to socialise such future costs in line with the approach to operating costs for other customers.
- Consistency of approach may be welcomed by stakeholders; especially as ANM becomes more widely utilised. Following its conclusion this consultation process may provide a more evidenced base for industry standardisation around a set of agreed principles.

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## Introduction

1. We support the principles behind SSEN's intended approach. We are particularly supportive of their aim to provide additional clarity and harmonisation of charging for operations and maintenance between demand and generation customers. However, we do not think that the current proposals best meet these aims. Specifically, we believe there should be an option to socialise ongoing third party operating costs where appropriate and more discussion is required on the treatment of operations and maintenance across different customer groups. Smarter and more flexible solutions should be part of the agreed definition of the Minimum Scheme since they are more commonplace today compared to when the charging frameworks were established.
2. The whole topic of charging is rightly under the spotlight with Ofgem-led work on Charging Futures (looking at Network Access Charging and Forward Looking Charging) and the Targeted Charging Review (focussed on residual charging). We expect that output from these considerations will lead to further changes to connection charging methodology statements and so updates before then should be limited in so far as it is practical.
3. We have also contributed to the Energy Networks Association's response to this consultation which reflects the collective views of the electricity Distribution Network Operators (DNOs). The principles in that response are consistent with those set out in this response. Our response provides additional information, including more detail on the Northern Powergrid approach to the treatment of costs of ANM connections.

### ***Question 1: Do you agree with SSEN's approach to classify the costs relating to operating 'flexible connections' as 'Operation and Maintenance' (O&M)?***

4. Traditionally, across all customer types (not just generation) all operation and maintenance costs have been socialised, even where it is possible to identify specific costs that benefit particular customers. This assumes that the connection is a Minimum Scheme and therefore the use of system charge is calibrated to recover the appropriate operations and maintenance costs.
5. There is therefore a need to consider the treatment of additional operating costs associated with smart solutions as well as consistency with different customer groups and/or job types.
6. We believe there should be an option to socialise ongoing third party operating costs associated with ANM where the connection is the Minimum Scheme.

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7. We favour a charging structure where customers experience three types of charge dependent on the services they utilise from their DNO:
    - a. Enhanced connection charges – at the time of the connection request the DNO has a direct relationship with the customer and the customer can make informed decisions on their energy requirements and usage. Offering baseline connection charges with the option of appropriate bespoke locational cost signals, should the network require them, at this stage is the most likely means of influencing behaviours;
    - b. DSO contracting – can be put in place in areas in which connection/despatch of demand or generation would be beneficial. There is the potential for a large number of contracts with parties (e.g. distributed generators, demand side response (DSR) or storage) to incentivise despatch at relevant times. The contracts could also allow the specification of duration and specific activation conditions (including penalties for non-delivery on obligations around despatch); and
    - c. Use of system (UoS) charges – if cost signals are being sent via enhanced connection, and/or DSO contracts then there is no need for DUoS charges to send overly complex signals – DUoS charges would send simple cost-reflective signals and ensure the cost recovery of efficient sunk costs.
  8. SSEN's current methodology already states that

*“where additional assets or in the case of generation schemes only the “high cost” assets beyond those required for the Minimum Scheme acceptable to us are installed, the additional ongoing operation, repair, maintenance and replacement costs are not supported by the Use of System tariff”.*
  9. So one aspect of this modification proposal is to highlight that some flexible connections may also involve assets over and above the Minimum Scheme. These are most likely to be in the minority since flexible connections are only generally accepted by customers if they are the Minimum Scheme. However, if a scheme is over and above the Minimum Scheme then it is reasonable to assume that the wider generality of customers should not be expected to contribute to the higher operations and maintenance costs.
  10. We think there may be an improvement to the proposed wording of SSEN's DNO specific methodology at 6.30 by including the word 'relevant' i.e. ‘...(including *relevant* flexible connections)...’
  11. Determining whether it is appropriate to always charge the additional costs associated with flexible connections in an upfront or ongoing annual charge will depend on a second criterion –
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i.e. who benefits from the specific scheme. If the scheme covers a wide group of customers then it may still be appropriate to socialise those costs even if the scheme is over and above the Minimum Scheme. However, if a scheme only benefits identifiable customers in a particular geographical area then the costs should be borne by those customers.

***Question 2: Do you agree with SSEN's proposed principle that a 'flexible connection' cannot be a 'Minimum Scheme'? Please explain your answer.***

12. The use of new technology and new commercial terms means that smarter more flexible connections are now the Minimum Scheme in generation rich areas of the network. We would expect flexible connections that result in lower connections costs to normally be the Minimum Scheme (i.e. the connection is least cost and technically standard). However, if Ofgem considers that flexible connections are not part of the Minimum Scheme definition then there may be a case to reconsider the definition itself.
13. We assume it is not SSEN's intention in the proposed methodology amendment at 6.30 to categorise all flexible connections as being over and above the Minimum Scheme, but simply to highlight that flexible connections may, but not always, include assets or costs above the minimum scheme. We think additional clarity may be required in the proposed wording and perhaps addressing our suggested change to 6.30 may be sufficient (see our answer to Question 1).
14. A customer may be willing to accept a flexible connection on the understanding that it may not provide the same level of security or network access as the Minimum Scheme, in return for the benefit of not having to fund reinforcement. We would expect flexible connections that result in lower connections costs i.e. by accommodating the new connection without reinforcement should normally be the Minimum Scheme (as they involve fewer new assets than a scheme with reinforcement). However, it appears possible that a flexible connection might be provided with the intention of achieving a quicker connection rather than a cheaper one if the minimum cost scheme would take longer to deliver; so it is also possible that a flexible connection in this instance may involve more assets than the Minimum Scheme.
15. A review of the definition of Minimum Scheme in the common connection methodology, in the context of flexible connections, may be appropriate. In other words, Ofgem and industry should continue to assess whether or not the codes and methodologies need to change in order to support the introduction of smart solutions where these are of benefit to customers.

***Question 3: Under the Common Connections Charging Methodology ('the CCCM'), the ongoing costs of operation and maintenance relating to additional assets requested by the connecting customer (over and above those associated with the Minimum Scheme) will be payable in full by that customer (not supported through the Use of System Tariff).***

***Based on***

- ***SSEN's interpretation of the 'Minimum Scheme',***
- ***SSEN's proposed classification of flexible connections' costs as 'O&M', and***
- ***the CCCM,***

***under SSENs proposed methodology, the entirety of costs of 'flexible connections' will be borne by the connecting customer.***

***Do you agree with SSEN's proposed apportionment of costs of 'flexible connections' and stated rationale (that all of these costs are bespoke and specific to the connection, do not provide any value to wider use-of-system customers and should not be recovered from the wider customer base)? Please explain your reasoning.***

16. Where a flexible connection is over and above the Minimum Scheme and involves annual bespoke costs and there are no wider benefits to use of system customers then SSEN's proposed approach (under SSEN redline text at 6.31) is reasonable i.e. chargeable to the relevant connections customer. In contrast, where there are wider benefits it may be appropriate to socialise such costs.
17. Whether there are any wider benefits to DUoS customers may be a scheme specific decision as some flexible connections may only benefit a particular new connectee. However, it possible for some flexible connection schemes to provide wider benefits, potentially including ANM schemes, if they enable the running of assets closer to design limits and therefore create more headroom in general for DG/storage export from other customers such as micro-generators. Once the ANM scheme is operational it may enable other flexible connections, or provide benefit to the wider customer base. A further benefit of ANM may be to enable deferment of shared funded (apportioned) reinforcement and therefore the deferment of the DUoS funded element of such reinforcement, which would be another potential wider customer benefit.

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***Question 4: Are there any relevant differences between types of flexible connections (eg timed, ANM, etc.) which should be considered in determining the approach to classifying and allocating associated costs? Please explain your answer.***

18. Yes, there are relevant differences as some flexible connections will not involve bespoke annual third party costs including simple timed or intertrip connections. The more complex nature of ANM schemes is the driver of such bespoke costs.
19. It is worth noting that flexible connections can be offered under different conditions such as:
- The customer has requested an ANM enabled connection offer as the standard connection offer will require significant reinforcement costs;
  - The area to which the customer requires a connection has already been enabled for ANM scheme; and
  - The network limitations that would otherwise require traditional reinforcement relate to thermal limitations of plant, voltage limitations or reverse power flow capability or any manageable combination of the aforementioned.
20. These will have different costs and control strategies so in order to determine the approach to classifying and allocating associated costs there needs to be a consideration of who benefits from the flexible connection, and this determination may be necessary on a scheme by scheme basis.
21. Bespoke costs may still be identifiable even if they are not services delivered by third parties. In other words, it is costs for performing services that should be considered, regardless of whether they are performed in house or by a third party.

***Question 5a: The following is primarily addressed to the Distributors. How do you currently classify and recover the costs of 'flexible connections'? What are the reasons for your approach? Does your approach differ depending on the type of scheme? How do you expect your current approach to evolve (if at all) over the medium term (next 3-7 years)?***

22. We are currently rolling out our fourth Active Network Management (ANM) zone and we consider the accepted connection offers to be the Minimum Scheme(s)<sup>1</sup>. Our approach for the latest development differs to that proposed by SSEN on the recovery of ongoing third party support costs for ANM schemes. Our policy is to socialise such future costs in line with the approach to operating costs for other customers.

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<sup>1</sup> In addition we have provided numerous single generator constraint management schemes that are simpler than ANM that benefits a group of customers. We also consider these to be Minimum Schemes. The costs of any lifetime operations and maintenance costs are also effectively socialised in Use of System charges.

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23. In our ANM areas, the costs are classified and recovered as follows:
- a. ANM costs - hardware costs will be customer funded;
  - b. Sole use costs – customer funded;
  - c. Third party support and any licensing costs – initial setup costs will be funded by the customer and ongoing support costs will be funded by us and recovered through indirect costs.
  - d. Customer funded costs may fall under the Electricity (Connection Charges) Regulations 2017 should any subsequent customers benefit from the installed assets.
24. We view our standard ANM solution as the Minimum Solution since it is the lowest cost solution available for the customer.
25. Today, ANM areas are distinct areas of our grid where different technical and commercial arrangements exist. Going forward, it is reasonable to assume that our control systems will transition from pockets of automation to a more integrated wider area of control. This may cause us to develop more integrated control systems that are actively managing a number of customer needs – say, maximising the amount of renewable generation on the system at the same time as smart charging of electric vehicles. Our innovation activity has tested these multiple driver needs with leading edge complex control systems that enable us to simultaneously balance these needs.
26. The whole topic of charging is under consideration with Ofgem-led work on Charging Futures (looking at Network Access Charging and Forward Looking Charges) and the Targeted Charging Review (focussed on residual charging). We expect that output from these considerations may lead to further changes to connection charging methodology statements.
27. Our published code of practice for the application of ANM is subject to a three-year review period and as experience is gained in implementing ANM schemes this document will evolve to incorporate further learning.

***Q5b: The following is primarily addressed to the connecting customers. We note that 'flexible connections' is not defined anywhere in the Charging Statement. SSEN is also proposing to remove paragraph 6.32 which details the 'operation, repair and maintenance' services they provide. What are your views on the clarity and internal consistency of the Statement?***

28. We are interested in any stakeholders' views that can be shared as part of the consultation process on this topic.

***Q5c: The following is primarily addressed to the connecting customers. What are your views on SSEN's proposal - that where there are annual third party costs incurred in operating the 'flexible connections', SSEN will pass these charges onto the customer on an annual basis?***

29. While we appreciate this question is primarily addressed to connecting customers please note our answer to question 3. We expect for the majority of ANM projects to be the Minimum Scheme. We also consider that there is a wider policy question associated with starting to charge one aspect of operations and maintenance costs to one group of customers.

***Q6: Do you believe the modifications made in SSEN's Statement are reasonable and are in line with the Relevant Objectives? Please provide reasons for your response.***

30. SSEN offers a clear rationale for its proposals. However we do not favour this direction as a blanket approach for all flexible connections:

- Most flexible connections are likely to be the Minimum Scheme since it is the lowest cost and technically feasible solution to connect to the system.
- As such, the costs of operations and maintenance should be expected to be socialised and included in the Use of System charges.
- For any projects that are not the Minimum Scheme then there should be the potential to charge the customer (or group of customers) for any costs associated with a service for which only they benefit.
- This approach is consistent with other customer types and the charging principles that apply to them also.