

DCP 328 Proposed Solution

Introduction

1. This paper is intended to outline a possible solution for DCP 328 which incorporates feedback received in responses to the first consultation. It also aims to answer the questions posed to the working group as actions following the meeting on March 20th.

Consultation Response Issues

2. The issues raised in response to the first consultation repeatedly highlight the issue of inaccurate fixed, capacity and reactive power charging if existing tariff structures are applied to multiple private network connectees.
3. There are two solutions to this issue:
 - A. Charge a single party for units flowing at the DNO to private network boundary, with no charge levied in respect of usage of individual private network connectees.
 - B. Create tariff structures which only include active unit charges, and so can be applied to the usage of all private network connectees and will sum to the total which would have been applied at the boundary.

Option A

4. This option aligns to option 1 in the consultation. As noted, this can only be applied where there is a boundary supplier, i.e. where difference metering is in place. Nonetheless, it has strong support in consultation responses, particularly from PNOs.

Option B

5. This option aligns to the new option 6 suggested by UKPN in its consultation response. It is a compromise which will remove the issues associated with fixed and capacity charges applying to private network connectees, but will introduce a differential in charging structure between a private network with competition in supply and one without, the impact of which should be considered carefully.
6. This approach could be applied in many different ways, and the detail of tariff calculation will need further thought (not considered in detail here). The simplest way in which to calculate tariffs is likely to be to use the underlying tariff calculation of the tariff for the type of end customer in question, remove elements which relate to voltages provided by the private network, and convert all charging elements to unit charges. For example, the tariff for a CT metered customer connected to a private network at LV, with DNO to private network boundary at HV would be derived based on the DNO's LV HH Metered tariff, with the LV substation and LV network contributions removed.

Proposed Solution

7. The proposed solution combines options A and B as follows:

- For all sites using the difference metering arrangements, option A would be used.
- For all sites using full settlement or shared metering arrangements, option B would be used.

Working Group Questions

What would the option 6 (UKPN) solution look like both at the boundary MPAN and for embedded MPANs?

8. As noted in our proposed solution, we do not think this option should be used for sites with difference metering, so will not be applicable to the boundary MPAN. For embedded MPANs we have set out in paragraph 6 an outline of how this could be applied.

Can option 6 forms part of the solution associated with option 2 or 5? If yes what would it look like.

9. Yes. Our proposed solution combines elements of option 6 with elements of option 5. Paragraph 6 outlines how this could be applied.

What are the pros and cons for Option 6 and any variation to option 2 and 5 that incorporates option 6 and whether they can operate against the three metering types?

10. Combining the new option 6 with elements of option 2 (using the tariff the DNO would apply if the end customer were connected at the boundary) will still create issues for NHH settled customers on private networks with DNO to private network boundary not at LV. For example, a NHH domestic customer connected to a private network with DNO to private network boundary at HV would face unit charges based on converting the HV HH Metered tariff to unit rates only. But that tariff is calculated on the basis of an industrial load profile, which is not appropriate for the calculation of a tariff for a domestic customer. So we suggest combining with option 5 only.

11. Pros:

- Issues with the application of fixed, capacity and reactive charges are resolved – regardless of how many customers have competition in supply and how diverse their usage, the sum of active unit charges will always sum to that which would have been applied at the boundary.
- When combined with option 5 (calculating new tariffs which only include elements relating to voltages provided by the DNO) it can easily be applied to NHH settled and HH settled customers alike.

12. Cons:

- A private network without competition in supply will face the full range of tariff elements charged at the boundary. A private network with competition in supply will face only unit rates. Whilst those unit rates could be calculated so that the 'average' customer faces the same charges under both arrangements, this will inevitably result in a discrepancy for each specific case, depending on (for example) the load factor of the site.

In addition all the options need to be considered further to determine whether they are appropriate for: each PNO type; Settlements (NHH v HH); and CDCM or EDCM.

13. Our proposed solution is compatible with all private network metering arrangements, settlement options and charging methodologies.

Do you believe there is one solution for all PNOs or is more than one solution required dependent on type of PNO?

14. As set out in paragraph 7, we think different solutions for different PNO types are appropriate. This aligns with consultation feedback, with PNOs giving strong support for option 1 which can only be used for difference metering and so must be combined with another option for sites which are not difference metered.

Which options do you believe the Working Group should develop further?

15. As set out in paragraph 7, we think the working group should focus on developing:
- option 1 to apply to all difference metered sites; and
 - a combination of options 5 and 6 to a point where it could be applied to all sites with full settlement or shared metering.