



## **DCUSA Change Report**

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### **DCP 090 - NESTED NETWORKS**

## 1 PURPOSE

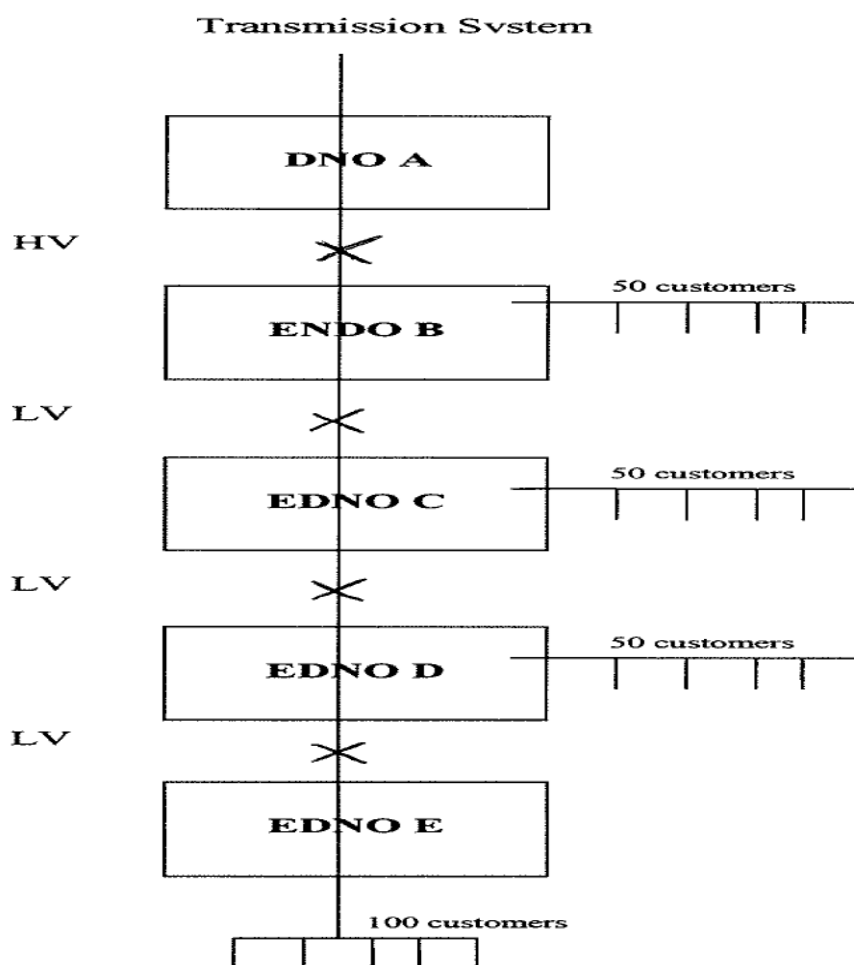
- 1.1 This document is issued in accordance with Clause 11.20 of the DCUSA and details DCP 090 – Nested Networks. The voting process for the proposed variation and the timetable of the progression of the Change Proposal (CP) through the DCUSA Change Control Process is set out in this document.
- 1.2 Parties are invited to consider the proposed amendments (Appendix A), together with the consultation documentation (Appendix B) and submit their votes using the form attached as Appendix C to [dcusa@electralink.co.uk](mailto:dcusa@electralink.co.uk) by 28 October 2011.

## 2 SUMMARY

- 2.1 DCP 090 seeks to create a new schedule in the DCUSA which will put in place charging arrangements in regard to Embedded Distribution Network Operators (EDNOs) for 'Nested Networks' distribution systems. 'Nested Network' means one or more EDNO's Distribution Systems that are connected upstream to an EDNO Distribution System connected to a DNO's Distribution System.
- 2.2 In April 2010 DCP 060 - Introduction of Portfolio Billing Alternative Solution, introduced the term Embedded Distribution Network Operator (EDNO). Schedule 19 of DCUSA<sup>1</sup> covers how Distribution Network Operators (DNOs) bill EDNOs for Use of System Charges. However, if a second EDNO connects to the first and there is a voltage drop, there is currently no mechanism for the first EDNO to recover Use Of system Charges from other EDNOs in the chain.
- 2.3 The diagram below illustrates this scenario: DNO "A" connects to the EDNO "B" at HV. EDNO "B" connects to EDNO "C" at LV. EDNO B has installed assets to transform down from HV to LV. All the EDNOs will have charged the Supplier based on LV tariffs. The DNO will have recovered Use of System Charges based on HV tariffs from all EDNOs. EDNOs C, D and E currently have benefitted in charging a higher price for Use of System Charges at the expense of EDNO "B" who installed the assets.

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<sup>1</sup> Available on the DCUSA website: <http://www.dcusa.co.uk/Extranet/DCUSADocuments.aspx?s=c>



2.4 DCP 090 looks at how a charge should be introduced and how the data would be provided so that a consistent approach is adopted by all affected Parties. It also considers how more complex network connectivity models can be facilitated.

2.5 In order to understand how the billing of these scenarios is proposed the legal text for the CP (set out in Appendix A) expands upon the EDNO term and creates two further terms: a Primary EDNO and a Secondary EDNO.

- A Primary EDNO is one which installs transformers and associated equipment to move from one voltage level to another e.g. HV to LV.
- A Secondary EDNO is one that has their Distribution System connected downstream of such assets.

2.6 To complete the definitions there will also be a new term called "Nested

Network”.

2.7 A Nested Network is an embedded Distribution System connected to another embedded Distribution System which is then connected to the DNOs Distribution System. In the diagram above there are three Distribution Systems considered to be part of the Nested Network, these are EDNO C, D and E.

2.8 The legal drafting refers to Settlement Class MSiD Count and Settlement Class Unit Count, each is defined under the Data Transfer Catalogue. To aid understanding an MSiD is an alias of an MPAN.

2.9 The principles agreed by the Working Group are as follows:

- The EDNO installing the assets to reduce the voltage of the Distribution System will become a Primary EDNO.
- The Primary EDNO will bill all the Secondary EDNOs.
- The Primary EDNO will be identified within each Bilateral Connection Agreement (BCA) cascaded down by each Secondary EDNO.
- Data should be provided by each Secondary EDNO to the Primary EDNO based on:
  - NHH – a subset of the portfolio billing data received from the DNO
    - The number of MSiDs associated with each Settlement Class that are connected in a Nested Network will be identified.
    - The units used for each Settlement Class (LLFC, PC, SSC, TPR combination) within the Nested Network will be calculated by dividing the number of MSiDs in the Nested Network on such a Settlement Class by the number of MSiDs billed by the DNO on that Settlement Class multiplied by the number of units for that Settlement Class.
  - HH – billed data sent to the Supplier.
- In both NHH and HH instances where there is more than one Primary EDNO identified, the data will be split based on the connectivity model of the Distribution System back through the various systems to the Primary EDNOs Distribution System.

2.10 Based on the above, EDNO B will be the Primary EDNO and EDNOs C, D & E will be the Secondary EDNOs.

- 2.11 It is important that when a Nested Network is identified this is captured in the Bilateral Connection Agreement either at the time or through variation. It is also important to recognise when there is a Primary EDNO and this is equally cascaded down through the BCAs.
- 2.12 It will be essential that EDNOs understand which MSiDs are associated with each Connection Point and be able to identify which Settlement Class each MSiD is associated with. When a Nested Network occurs they will then be able to understand the number of MSiDs and their Settlement Class. This data is then used against their total portfolio of MSiDs in that GSP Group to determine the units used.
- 2.13 For the HH sites, the data that is sent to the DNO is also sent to the Primary EDNO. The DNO will charge at the HV tariff rate, and the Primary EDNO will charge the difference between the HV and LV tariff rates.

### **3 DCP 090 – WORKING GROUP**

- 3.1 The DCUSA Panel established a Working Group to assess and develop DCP 090.
- 3.2 The DCP 090 Working Group met on 3 occasions and consisted of representatives from DNO and IDNOs.

### **4 CONSULTATION**

- 4.1 The Working Group carried out a Consultation to give Parties an opportunity to review and comment on the CP.
- 4.2 The majority of respondents understood the CP and were supportive of its intent. One Party indicated that the cost of implementing such a solution would outweigh the benefits.
- 4.3 One IDNO Party indicated that whilst DCUSA General Objectives 1 and 2 could technically be considered to be better facilitated, the Party noted that the proposed solution for Nested Networks would add levels of unnecessary complexity and therefore considered that the DCUSA Objectives are not better facilitated. The Party noted that Ofgem is keen to promote increased transparency and clearer methods of operating and maintaining networks and providing information.
- 4.4 A full summary of Party responses and Working Group comments to the

responses is set out in Appendix B.

## **5 PROPOSED LEGAL DRAFTING**

- 5.1 DCP 090 seeks to introduce a new Schedule into the DCUSA. The Schedule will put in place charging arrangements in regard to Embedded Distribution Network Operators (EDNOs) for 'Nested Networks' distribution systems.
- 5.2 The proposed legal drafting of DCP 090 has been drafted by Wragge and Co and is attached as Appendix A.

## **6 EVALUATION AGAINST THE DCUSA**

- 6.1 The Working Group considered the consultation responses regarding whether DCP 090 better facilitated each of the DCUSA General Objectives.
- 6.2 The Working Group agreed to the following:
- Objective 1<sup>2</sup> – Better facilitated. Enables the network operator to recover the costs of his network and hence that network is more economical.
  - Objective 2<sup>3</sup> – Competition amongst IDNOs is facilitated as each gets a fairer margin for his network and the use thereof by the downstream distributor.
  - Objective 3 – No impact identified.
  - Objective 4 – No impact identified.

## **7 IMPLEMENTATION**

- 7.1 DCP 090 is classified as a Part 1 matter in accordance to Clause 9.4.2 (B) of the Agreement as it is likely to have a significant impact on competition in the distribution of electricity.
- 7.2 The proposed implementation date of DCP 090 is the first DCUSA release following Authority Consent.

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<sup>2</sup> The development, maintenance and operation by each of the DNO Parties and IDNO Parties of an efficient, co-ordinated, and economical Distribution System

<sup>3</sup> The facilitation of effective competition in the generation and supply of electricity and (so far as is consistent therewith) the promotion of such competition in the sale, distribution and purchase of electricity

## **8 PANEL RECOMMENDATION**

8.1 The Panel approved this Change Report ex-committee on the 13 October 2011. The Panel considered that the Working Group had carried out the level of analysis required to enable Parties to understand the impact of the proposed amendment and to vote on DCP 090.

8.2 The timetable for the progression of the Change Proposals is set out below:

<b>Activity</b>	<b>Date</b>
Change Report issued for voting	14 October 2011
Voting closes	28 October 2011
Change Declaration	01 November 2011
Authority Determination	06 December 2011
CP Implemented	First DCUSA release following Authority consent

## **9 APPENDICES:**

Appendix A - DCP 090 - Legal Drafting

Appendix B - DCP 090 – Consultation Documents and Working Group Comments

Appendix C - DCP 090 - Voting Form