

# **DCUSA Change Report**

DCP 137 - Introduction of Locational Tariffs for the Export from HV Generators in Areas Identified as Generation Dominated

#### 1 PURPOSE

1.1 This document is issued in accordance with Clause 11.20 of the DCUSA and details DCP 137 - Introduction of locational tariffs for the export from HV generators in areas identified as generation dominated.

- 1.2 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.
- 1.3 Parties are invited to consider the proposed legal drafting amendments (Attachment 1) and submit their votes using the form provided as Attachment 2 to <a href="mailto:dcusa@electralink.co.uk">dcusa@electralink.co.uk</a> no later than 8 September 2014.

#### 2 BACKGROUND

- 2.1 Currently under the Common Distribution Charging Methodology (CDCM), LV and HV generators receive a credit for units exported, as a component of their Distribution Use of System Charges. This credit will be paid by the DNO to the Supplier with whom the generator is registered, rather than being paid directly to the generator. The rationale behind paying a credit to generators is that local generation can reduce the need for costly network reinforcement by offsetting local demand.
- 2.2 However, in some parts of the HV and LV distribution networks local generation is forecast to grow to the extent that it exceeds local demand at certain times of the year. In these "generation dominated areas" the presence of generators may trigger network reinforcement rather than prevent it. Continuing to pay a credit to generators in generation dominated areas could incentivise further generation to connect in these areas, which would increase the likelihood of the DNO needing to reinforce the network.
- 2.3 Ofgem identified this as an issue when they approved the CDCM and applied a condition in this respect. The condition was that the DNOs should review the issue of how to charge generators where the network is or will become dominated by generators as opposed to demand customers.

2.4 The DNOs worked with Frontier Economics to complete detailed analysis on this issue. Frontier Economics produced a report which concluded with three options to address Ofgem's concern. The DNOs submitted this report and a plan for how they would progress the options. Following this submission Ofgem was satisfied that the DNOs had fulfilled the condition.

- 2.5 The Methodologies Issue Group (MIG) Generator Dominated Areas (GDA) working group was subsequently established to assess the options. The group was formed of representatives from Generator, DNO, Supplier and IDNO organisations.
- 2.6 The MIG GDA working group produced a report setting out three potential options for addressing the issue of how to charge generators where the network is or will become generation dominated. This report is provided as Attachment 3.
- 2.7 After consideration of the options, the MIG GDA group decided to progress option 1 from the MIG GDA Report. On behalf of the group, Electricity North West subsequently raised DCP 137 'Introduction of locational tariffs for the export from HV generators in areas identified as generation dominated' which proposes to update the DCUSA to implement the MIG GDA group proposal.

## 3 DCP 137

- 3.1 The intent of DCP 137 is to change the methodology for calculating charges for HV generators within the CDCM by:
  - Introducing a methodology to identify which primary substations are generation dominated; and
  - Reducing or removing the credit currently paid for the units exported by High Voltage (HV) generators connected to the primary substations that have been identified as generation dominated.
- 3.2 As set out as option 1 in the MIG GDA report, DCP 137 seeks to introduce a simple locationally varying charging regime for HV generators. Under this option every HV generator would be assigned to a set of generation charges based on the primary substation to which they are electrically connected. Each primary substation would be assigned one of four probabilities of generation dominance based on the number of years before it would be deemed generation dominated. The level of generation

dominance would determine how much generation credit is removed from these sites.

- 3.3 This has the advantage that the credit applied would reflect the level of generation dominance, including removing all of the credit if appropriate. Option 1 also provides a locational charge and any reduction in the credit would not affect generators in other non-generation dominated areas.
- 3.4 The option utilises the same 'two test' approach to identify when a substation would become generation dominated that would be used for either of the options. The 'two test' approach is detailed in the proposed schedule 16 legal text.
- 3.5 A simple description of the 'two test' method is as follows:
  - Test 1 seeks to identify if the maximum generation connected to the substation would be greater than the minimum capacity of the substation once the minimum demand is taken into account. This is effectively the summer minimum demand test.
  - Test 2 then seeks to identify if the maximum generation connected to the substation would be greater than the maximum demand at the substation.
     This effectively tests to see if the substation would need reinforcing for demand purposes before needing reinforcing for generation purposes.
- 3.6 Each test is conducted at 2½, 5, 7½ and 10 years. If in any of the four time periods a substation passes both test 1 and test 2 then it is deemed generation dominated. The lowest time period in which the substation passes both tests is then used to determine charges that would apply.
- 3.7 The ten year period has been selected as this is a reasonable time horizon from a forecasting perspective. The DCMF MIG chose to have a tiered impact so that there is a gradual price signal ahead of full generation dominance occurring. This was decided to be over three stages, namely low (7 ½ years), medium (5 years) and high (2 ½ years).
- 3.8 Further information on DCP 137 can be found in the MIG GDA Report (Attachment3) and Change Proposal form (Attachment 4). The option proposed under DCP 137 is option 1 in the MIG GDA report.

#### 4 DCP 137 – WORKING GROUP

4.1 The DCUSA Panel established a Working Group to assess DCP 137. The Working Group met on 12 occasions and was comprised of Suppliers, DNO and Ofgem representatives.

- 4.2 Meetings were held in open session and the minutes and papers of each meeting are available on the DCUSA website www.dcusa.co.uk.
- 4.3 The Working Group carried out two consultations to give DCUSA Parties and other interested organisations an opportunity to review and comment on DCP 137. As part of the consultations a document was issued listing the primary substations that have been identified as generation dominated, thus allowing respondents to determine whether they have any connections to GDA substations.

#### **5 CONSULTATION ONE**

- 5.1 There were 17 responses received to the first DCP 137 consultation. The Working Group discussed each response and its comments are summarised alongside the collated Consultation responses in Attachment 5.
  - 5.2 A summary of the responses received, and the Working Group's conclusions are set out below:

## Question 1 - Do you understand the intent of the CP?

- 5.3 The Working Group noted that the all respondents understood the intent of the CP.
- 5.4 One respondent stated that whilst they understood the intent of the CP they consider that further definition is required before it can be concluded that the CP better facilitates the DCUSA Objectives, particularly around the definition of the term "Min Gen".
- 5.5 The Working Group discussed this comment and agreed that a working process document should be produced to provide greater clarity on the implementation of the methodology. This working process document is attached as Attachment 6.

# Question 2 - Are you supportive of the principles of the CP?

5.6 The Working Group noted that respondents were split in their support for DCP 137. The following table provides a break down by respondent type.

| Respondent Type | Are you su | Are you supportive of the principles of the CP? |         |       |  |  |
|-----------------|------------|---|---------|-------|--|--|
|                 | Yes        | No  | Abstain | Total |  |  |
| DNO             | 5          | 1   | 0       | 6     |  |  |
| Supplier        | 2          | 1   | 0       | 3     |  |  |
| IDNO            | 1          | 0   | 0       | 1     |  |  |
| Generator       | 1          | 5   | 0       | 6     |  |  |
| Other           | 0          | 0   | 1       | 1     |  |  |
| Total           | 9          | 7   | 1       | 17    |  |  |

- 5.7 Three of the respondents that were not supportive of the principles of DCP 137 highlighted that the justification for DUoS credits is that generation capacity allows demand reinforcement to be deferred. The Working Group noted its agreement that the majority of HV connected generation does defer demand reinforcement and generation credits will continue to be paid in the majority of circumstances. The group noted that DCP 137 seeks only to remove credits where there is a clear signal that the substation is or will be generation dominated.
- 5.8 Two of the respondents that are not supportive of the principles of the CP expressed concerns regarding the use of forecast data to determine if a substation is generation dominated. The Working Group noted the same data is used to plan the network reinforcements in a timely manner and all DUoS charges are based on forward looking forecasts.
- 5.9 One respondent suggested that a wider view should be taken on how to optimise the UK electricity network. The Working Group noted that DCP 137 seeks to make DUoS prices cost reflective and a wider view is outside of the scope of the CP.
- 5.10 Three respondents suggested that connection charges provide sufficient incentive to prevent generators from connecting at undesirable locations, as generators who wish to connect at levels which trigger reinforcement are charged significantly more for system upgrades. The Working Group noted that if a new connection has driven network reinforcement then this location would not be generation domination because the reinforcement would already have occurred. The group also noted that, in addition to new connections, a substation may become generation dominated due to a reduction in demand.
- 5.11 The Working Group noted that prior to the introduction of the CDCM generators

received no credits. It was the view of the Working Group members that paying a credit is an incentive and not paying a credit is effectively a neutral position, therefore, the removal of credits should not be seen as a dis-incentive.

# Question 3 - Do you consider that the proposal better facilitates the DCUSA Objectives? Please provide supporting information.

5.12 The following table outlines the respondents' views on which DCUSA Objectives are better facilitated by the CP:

| DCUSA General<br>Objectives | No. Of Respondents that agree it is better facilitated | DCUSA Charging Objectives | No. Of Respondents that agree it is better facilitated |
|-----------------------------|--|---------------------------|--|
| Objective 1                 | 8  | Objective 1               | 7  |
| Objective 2                 | 7  | Objective 2               | 6  |
| Objective 3                 | 8  | Objective 3               | 7  |
| Objective 4                 | 0  | Objective 4               | 8  |
| Objective 5                 | 0  | Objective 5               | 0  |

- 5.13 The Working Group noted that nine respondents agreed that the CP better facilitates the DCUSA objectives and five disagreed. A further two respondents neither agreed nor disagreed and one felt that some DCUSA objectives are better facilitated whilst others are not.
- 5.14 One respondent suggested that the mechanism of withdrawing Generation Distribution Use of System (GDUoS) in 33% steps is arbitrary and not reflective of the actual costs of providing re-enforcement at that particular primary substation. The Working Group discussed this point and noted that one of its aims had been to introduce a straight forward approach which would be simple to understand, hence the reduction of credits in 33% steps.
- 5.15 This respondent also noted that in his view the reductions in the GDUoS benefit will place an excessive burden on HV generators and result in an undeserved windfall benefit to the DNOs. The Working Group noted that the removal of credits does not provide a windfall benefit to DNOs. DNOs are neutral to the application of credits, any reduction in credits would result in lower demand charges.
- 5.16 Three respondents noted that in their view DCP 137 discourages generation from utilising the full export capacity of primary substations, therefore, making the

distribution system less efficient and economical. The Working Group noted that it does not believe that DCP 137 discourages generation from utilising the full export capacity.

- 5.17 The same three respondents also suggested that on the basis that demand growth will continue, generator credits accurately reflect the saving of costs that are reasonably expected to be incurred to meet that demand growth. It was noted by the Working Group that if demand growth does increase then credits will remain or could increase.
- 5.18 One respondent noted that they agreed that CDCM Objective 1 and General Objective 3 are better facilitated; however, in their view the proposal is detrimental to CDCM Objective 2 and General Objective 2. The respondent noted that it will become very difficult for Suppliers to forecast generation charges as they will not know when a primary substation is likely to move between the charging bands and they will not know which primary a customer connects to when they take that customer on. Suppliers could also have customers switching between different bands year on year, increasing the volatility of the CDCM tariffs. The respondent also believes that DCP 137 is detrimental to General Objective 1, as it will be difficult for DNOs to give accurate indications of which tariff band a customer will be on.
- 5.19 The Working Group discussed these points and noted that consideration will need to be given as to the provision of information (this is covered further under question 9). The group also noted that there is a trade-off to be made between cost reflectivity and volatility.
- 5.20 The Working Group agreed that it does appear that in some ways there is a clash with the way that charges are socialised, as this Change Proposal is a move away from the socialisation of generation charges while there is no similar change for demand. It was highlighted that demand sits outside of the scope of DCP 137 and it was also suggested that if generators are not providing a benefit then it is unfair to use other customer's money to pay credits to them. For this reason generation and demand are different.

#### Question 4 - Do you have any comments on the proposed legal text?

5.21 Twelve respondents had no comment on the proposed legal text and three noted

that it appears to meet the objectives of the Change Proposal. One respondent noted that as they oppose the principle proposed for recovering the cost of reenforcement caused by a primary substation becoming GDA, they also oppose the proposed legal text.

5.22 One respondent noted that they did not see the value or purpose of publishing single rate HV generation charges. The Working Group noted that the CDCM methodology contains single rate HV generation charges for intermittent generation connected at HV because intermittent generation is unable to react to the red, amber, green timebands. The Working Group agreed that this comment is not relevant to DCP 137.

# Question 5 - Are there any alternative solutions or matters that should be considered by the Working Group?

- 5.23 Eleven respondents were not aware of any other solutions or matters that the DCP 137 Working Group should consider.
- 5.24 One respondent suggested that rather than dissuade generators from connecting to GDA primary substations the industry should allow generators to self-regulate themselves by providing good quality information on GDA primary substations. This would give generators at a very early stage in the project lifecycle the choice of either relocating their project or proceeding in the full knowledge that they are likely to incur the higher connection costs.
- 5.25 The Working Group discussed this suggestion and noted that information will be published by each DNO to show which primary substations are currently or are likely to become generation dominated. However, the Working Group agreed that this information would not remove the need for a financial incentive and that generators should not continue to receive credits where they are driving costs on the DNOs network.
- 5.26 One respondent noted that the solution may lead to additional LLFCs and some DNOs do not have the spare capacity for additional LLFC numbers to facilitate this. The respondent suggested that it would be prudent to replace the current LLF codes with alpha numeric codes. The Working Group noted that it is aware of this issue, however, the introduction of alphanumeric codes for LLFCs is outside the scope of

DCP 137.

5.27 Another respondent suggested that DNOs should be incentivised to make more use of innovative ways of getting more generation onto the network, such as active network management and distributed storage. The Working Group noted that DCP 137 has been raised to look at removing the DUoS benefit from generation connecting in locations where it is driving network costs. It was noted that there are other industry groups and initiatives looking at the items listed by the respondent.

- 5.28 One respondent noted that there are no generator representatives participating in the Working Group and suggested that in their view the progression of the Change Proposal would appear to be flawed in the absence of direct input from generator participants.
- 5.29 The Working Group discussed this comment and noted that the proposal was developed by DNOs to meet a CDCM condition placed on them by Ofgem. It was noted that generator representatives were present on the Methodologies Issue Group (MIG) Generator Dominated Areas (GDA) working group, which developed the change prior to the DCUSA Change Proposal being raised. In addition, as the proposal has been developed it has been the subject of stakeholder consultation and independent economic analysis and the DCP 137 consultation was re-issued to a wider audience to ensure generation companies were able to view the change and comment on it.
- 5.30 One DNO Party suggested that GDAs are a very minor issue and in their view the extent of this proposal is unwarranted given the scale of the problem it is trying to resolve. It was the respondent's view that the status quo is adequate. The Working Group discussed this comment and noted that although there is currently a relatively small number of generation dominated primaries, this CP is giving a forward looking signal which should reduce the likelihood of more generation dominated primaries in the future and reduce DNO reinforcement costs.
- 5.31 The respondent further noted that for their distribution areas the expected increase in Generation Dominated Areas is to the EHV and LV side, not the HV side.
  Therefore, it is their view that the CP targets the wrong area. The Working Group noted that the CP had been limited to HV based on work carried out by consultants Frontier Economics.

# Question 6 - Are you aware of any wider industry developments that may impact upon or be impacted by this CP?

- 5.32 Eleven consultation respondents noted that they were not aware of any wider industry developments that may impact upon or be impacted by DCP 137.
- 5.33 Two respondents noted that Ofgem intends to review transmission charging for embedded generation. The respondents suggested that charging for embedded generation should be considered holistically across distribution and transmission.
- 5.34 The Working Group discussed this suggestion and noted that DUoS charges are independent of transmission charges; therefore, any work done by NGET on transmission charges would not impact decisions on the structure of DUoS charges. It was noted that if Ofgem would like to bring the two into alignment they could give the direction to do so.
- 5.35 Another respondent suggested that cuts to Feed-In Tariffs will significantly slow the rate of new HV generation projects coming through; therefore, the perceived problem may have significantly diminished by the time DCP 137 is implemented. The Working Group noted that this is outside the scope of DCP 137 and does not impact the proposed solution.
- 5.36 An IDNO Party noted that an area of concern to them is the treatment of generation on IDNO networks. The Party noted that this is separate issue and not for consideration under DCP 137.
- 5.37 One respondent highlighted that the NHH/HH billing (MIG 22) group is looking at the possibility of moving away from tariffs based on profile class and introducing tariffs based on voltage levels. The respondent noted that in their view any significant change to current tariff structures is somewhat premature as it may prove to be abortive.

### Are you supportive of the proposed implementation date of 1 April 2013?

5.38 The Working Group noted that ten respondents were against the implementation date, six supported it and one respondent abstained. The following table provides a break down by respondent type.

| Respondent Type | Are you supportive of the proposed implementation date of 1 2013? |    |         |       |
|-----------------|---|----|---------|-------|
|                 | Yes   | No | Abstain | Total |
| DNO             | 2   | 4  | 0       | 6     |
| Supplier        | 1   | 2  | 0       | 3     |
| IDNO            | 1   | 0  | 0       | 1     |
| Generator       | 1   | 5  | 0       | 6     |
| Other           | 0   | 0  | 1       | 1     |
| Total           | 5   | 11 | 1       | 17    |

- 5.39 Of those respondents that did not support the proposed implementation date, six suggested that an April 2014 implementation date would be more appropriate. There were several reasons why this was suggested. Some respondents felt that implementation should be delayed as the current number of generation dominated areas is not yet high enough to warrant making a change. Others felt that a longer notice period was needed to allow communication of the changes to industry and updates to systems and contracts to be made.
- 5.40 The Working Group noted the respondents' views and agreed that the implementation date should be 1 April 2014 to allow sufficient time to implement the change.

Question 8 - DNOs currently convey charge information using the charging statement.

DNOs propose to display the applicability of the new charges in a new annex to the charging statement:

- What level of information should be included?
- Do you have any suggestions on how this information should be presented?
- 5.41 The Working Group noted that the responses to this question highlight the need to provide sufficient information. The level of detail requested varied, predominantly by respondent type.
- 5.42 Generator respondents primarily requested data by individual primary substation showing whether or not the substation it is generation dominated and the applicable HV tariff. They also need to know which primary substation they are connected to. One respondent suggested that the source data and methodology should also be published. Another suggested that an online searchable map would

be useful.

5.43 One generator suggested that should DNOs publish a 5 year rolling forecast of which substations will become generator dominated. The Working Group noted that currently 10 years of forecast data is used to calculate the GDAs. Therefore this would reduce the information provided and change the intent of the CP.

- 5.44 The Working Group noted that Suppliers predominantly want to be able to establish what charges are applicable to specific customers. One highlighted the importance to Suppliers of being able to identify the applicable charges prior to contracting with a new customer. The respondent suggested that there are two potential approaches that would allow this, either by creating new tariffs with a new LLF which will allow suppliers to identify the generator correctly in ECOES, or by producing an additional schedule where the generation credit qualification status of each HV export MPAN in a network is listed.
- 5.45 Several DNO respondents noted the need to display the information in a consistent manner to the current information in the charging statement. One DNO suggested that tariff information would need to be provided by postcode, as Suppliers taking on newly connecting customers will not have an MPAN.
- 5.46 The Working Group believes that the information would best be displayed in the spreadsheet that accompanies the LC14 statement.

# Question 9 - DNOs would need to provide a list of primary substations that are generation dominated:

### • Is the charging statement the best way of providing this?

- 5.47 The majority of respondents agreed that using the charging statement is the best method of providing a list of generation dominated primary substations. Some respondents suggested that it would also be useful to provide the information elsewhere too, for instance, on DNO websites or a searchable map.
- 5.48 Only one respondent disagreed, noting that in their view the charging statement is not necessarily the best document for providing a long list of primary substations, as this would potentially add complexity to the document without providing interpretable information. This respondent suggested that a more stakeholder

friendly approach may be a postcode list or a colour coded network and region map.

5.49 It was noted by the Working Group that the majority of respondents agree that the charging statement is the best way of providing information on generation dominated primary substations.

# Question 10 - How should the implementation of this change be conveyed to the affected end-users/customers?

- 5.50 The DNO respondents to this question all suggested that communication to the customer should predominantly be through the Supplier, as DNOs do not have a direct relationship with customers.
- 5.51 The Supplier respondents generally indicated that DNOs should contact customers, although one noted that this would rely on DNOs having good contact information for customers. One Supplier respondent highlighted that there may be customer dissension about relinquishing credits and the wider regulatory risk that will be associated with the future value of those credits in areas of the network which aren't even expected to be generation dominated in 10 years.
- 5.52 The majority of generators to respond to the consultation suggested that DNOs should provide customers with as much detail as possible. Two suggested this should be via letter, with one of these two suggesting that DNOs should also organise follow up workshops for HV connected customers.
- 5.53 The independent respondent stated that DNOs should contact generators directly and publish information on their websites, and also contact trade associations such as Energy UK.
- 5.54 The IDNO respondent stated that DNOs should contact generators and suppliers at the same time and utilise the DCMF to notify relevant organisation. Additionally a 'guide' document could be created and distributed to end users explaining the changes and how this affects them. However they noted that that this may be outside the scope of DCUSA.
- 5.55 The Working Group discussed the responses received and agreed that primary responsibility for communication of the changes should sit with Suppliers as they have the contractual relationship with the customer. However, it was agreed that as

DNOs are responsible for the connection, it would not be unreasonable for them to also contact the customers. The Working Group noted that the relationship between the DNO and the customer may not exist at the moment.

5.56 The Working Group also noted that there is a perception amongst some respondents that not enough information has been provided so far. The group highlighted that the proposal has been consulted on and mentioned in various industry forums, such as the Distribution Charging Methodologies Forum (DCMF). It was the view of the Working Group that DNOs should further consider how the provision of information could be improved.

Question 11 - The Working Group plans to apply the new tariffs to IDNOs if the IDNO is connected at HV and the primary substation is defined as generation dominated. Do you think this is appropriate and are there any implications on IDNOs or other network users.

- 5.57 The majority of respondents to this question agreed with the Working Group's proposal to apply the new tariffs to IDNOs if the IDNO is connected at HV and the primary substation is defined as generation dominated.
- 5.58 The Working Group noted that the only IDNO to respond to the consultation stated that they support the intent of DCP 137; however, an area of concern to them is the treatment of generation on IDNO networks. The respondent noted their belief that this should be the subject of further work outside and separate to DCP 137.
- 5.59 A DNO respondent highlighted that IDNOs are required to mirror the charges of DNOs, therefore, they must be charged accordingly. The respondent suggested that this creates an area of uncertainty for IDNOs as the primaries that their sites connect to could switch between different tariff bands severely affecting their margins. For this reason the respondent feels that DCP 137 is anti-competitive. The Working Group discussed this comment and agreed that it was outside of the scope of DCP 137.

#### Question 12 - Do you have any other specific comments on the proposed option?

5.60 Three consultation respondents noted that in their view the proposed solution is too complex and gives little benefit given the low number of Generation Dominated Areas. One of these respondents suggested that the change could be monitored on

an annual basis and a penetration threshold set when the overall network is deemed to be moving more towards generation domination. The Working Group noted these views.

- 5.61 Two respondents queried the use of forecast data. One suggested that the ten year horizon would make the forecasts inherently unreliable and stressed that the review period should be annual to ensure that any changes that reverse the assessment of impending generation dominance is quickly taken account of. The other respondent queried whether generators would receive a rebate if predicted generation dominance does not materialise.
- 5.62 The Working Group discussed these points and noted that an annual review will occur to ensure any changes to the forecast can be implemented quickly, in the same way as other charge setting information. It was also noted that appropriate credits will be paid based on the forecast at that time and rebates will not be given should forecasts change. It was highlighted that all DUoS charges are based on forward looking forecasts.
- 5.63 Four respondents highlighted the importance of the provision of information, with one of these respondents proposing that it would be sensible to delay implementation until a broader industry view can be sought.
- 5.64 The Working Group noted that prior to DCP 137 being raised, the MIG GDA working group included generation representatives and the proposal was developed by DNOs to meet a condition placed on them by Ofgem. Also, as the proposal has been developed it has been the subject of stakeholder consultation and independent economic analysis.
- 5.65 The Working Group noted its agreement that sufficient information will need to be provided. In view of the consultation responses the Working Group issued an interim update to the respondents of the consultation providing them with information on the progress of DCP 137.

## **6 CONSULTATION TWO**

6.1 Following the first DCP 137 industry consultation the Working Group worked with a modelling support consultant to update the DCUSA Charging Methodology Models

- to implement the proposed DCP 137 solution. A second consultation was then issued seeking additional feedback from market participants on the proposal.
- 6.2 There were 10 responses received to the second DCP 137 consultation. The Working Group discussed each response and its comments are summarised alongside the collated Consultation responses in Attachment 7.
  - 6.3 A summary of the responses received, and the Working Group's conclusions are set out below:

### Question 1 - Do you understand the intent of the CP?

The Working Group noted that all respondents understood the intent of the CP. However, one respondent highlighted that it was unclear to them what should apply where a DNO network is generation dominant, but the IDNO network is not (and vice versa). The Working Group discussed this comment and noted that the concept under DCP 137 is that the DNO is applying charges for the use of their network. Information on the generation dominated areas will be included within the LC14 charging statement. The information will list the primary substation along with HV generation connections and IDNO connections. It will be for the IDNO to reflect the appropriate charge in their network area for any HV generation that they may have connected. If a network is not identified as generation dominated then normal HV generation charges will apply.

### Question Two - Are you supportive of the principles established by this proposal?

6.5 The Working Group noted that the majority of respondents were supportive of the principles established by the CP. The following table provides a breakdown by respondent type.

| Posnondont Typo | Are you supportive of the principles established by this proposal? |    |        |       |  |
|-----------------|--|----|--------|-------|--|
| Respondent Type | Yes  | No | Partly | Total |  |
| DNO             | 6  | 0  | 0      | 6     |  |
| Supplier        | 0  | 1  | 1      | 2     |  |
| IDNO            | 0  | 0  | 1      | 1     |  |
| Generator       | 0  | 1  | 0      | 1     |  |
| Total           | 6  | 2  | 2      | 10    |  |

6.6 Of the two respondents that were partly supportive, one explained that they have difficulty in understanding how the proposal will work in practice for embedded networks which themselves may or may not be generation dominant. The Working

Group noted that the query had been discussed in response to question one. The other respondent suggested that basing the level of entitlement to credits on forecasts is contentious as it depends heavily on speculation by DNOs about future levels of demand and generation. The Working Group discussed this comment and noted that DNO forecasts are not speculative but rather are based on documented assumptions using the best available published data at that time. Credits are paid based on forecasts that generators will offset the need for demand reinforcement. If DNOs did not use forecasts then these credits could not be paid.

- 6.7 One of the respondents that was not supportive of the principles of the CP suggested that if incremental high voltage connected generation causes the primary substation to require reinforcement, then it is the incremental generation that should be discouraged. The Working Group discussed this comment and observed that generation growth can also be caused by LV generation growth and by reductions in net demand at both LV and HV, rather than solely by increases in localised HV generation caused by new HV generation connections.
- 6.8 Another respondent suggested that the proposal discriminates unfairly against generators by proposing locational DUoS tariffs for generators and not for demand. It was the respondent's view that this does not recognise that the future progression of networks needs to manage demand and generation as equal customers. In response, the Working Group noted that DCP 137 is about the implementation of locational credits and not about applying locational charges. The Working Group does not believe that DCP 137 is discriminatory as it is seeking to remove credits where use is seen to increase the need to potentially reinforce the network. Demand users are currently seen as potentially needing to increase network investment.

#### Question Three - Do you have any comments on the proposed legal text?

6.9 Only one respondent commented on the DCP 137 legal text, suggesting that it does not set out fully how arrangements apply in respect of downstream embedded networks which may or may not inject energy onto the upstream system. The Working Group noted that this area had been discussed against question 1 and that DNOs will detail the application of generation dominated area tariffs in their LC14 statement in line with the detail provided on the other DUoS tariffs.

# Question Four - Do you agree with the ten year time horizon and how it has been split?

6.10 The Working Group noted that DNO respondents to this question were supportive of the proposed 10 year time horizon whilst other respondents were not so. The following table provides a breakdown by respondent type.

| Respondent Type | Do you agree with the ten year time horizon and horizon it has been split? |   |    |  |  |
|-----------------|--|---|----|--|--|
|                 | Yes No Total   |   |    |  |  |
| DNO             | 6  | 0 | 6  |  |  |
| Supplier        | 0  | 2 | 2  |  |  |
| IDNO            | 0  | 1 | 1  |  |  |
| Generator       | 0  | 1 | 1  |  |  |
| Total           | 6  | 4 | 10 |  |  |

- 6.11 One of the respondents to disagree explained that this was because they do not support the introduction of locational DUoS tariffs for generators. Another respondent suggested that the timeframe is too long, especially when looking at a range of technologies with varied deployment lead times ranging from a few months to a couple of years; and connections that are heavily dependent on changeable Government policy (regarding subsidies). In response, the Working Group noted that the reason a ten year timeframe was chosen is because it provides a reasonable staged approach rather than a step change. It also gives generators a view of what will happen longer term and thus enables them to prepare.
- Another respondent suggested that a 10 year horizon would appear to be open to subjective judgement in many instances. The Working Group discussed this comment and noted that the forecast values proposed have been set out in the consultation document and DNOs have followed a consistent approach in setting these forecast values. The approach for calculating the forecast will be set out in the CDCM User Manual should DCP 137 be approved. This is consistent with how other forecasts are derived within the methodology. The Working Group do not believe that it is appropriate to 'hard code' in DCUSA the method for calculating the forecast due to the fact that the available source data can change. This approach allows DNOs to use the best available data. It was further noted that the Generation Dominated Areas Working Procedure (Attachment 6) captures the approach for calculating the forecast and will form the basis for what is included with the CDCM User Manual. The Working Group notes that the CDCM User Manual is maintained by the DCMF MIG.
- 6.13 Another respondent suggested that any changes to DUoS credits should be

considered annually based upon actual data not forecasts; and if forecasts are to be used then 10 years is too long. The Working Group observed that the DCUSA Charging Methodologies are currently based on forecasting long run costs and not on actual accounts based costs. The purpose of this is to provide a signal for driving efficient use of the network. The purpose of the 2.5,5, 7.5 and ten year timeframe is to provide a staged signal and avoid a step change in the application of credits.

# Question Five - Do you have any comments on the attached blank CDCM, EDCM and ARP models?

6.14 In response to this question one respondent suggested some formatting changes to the Annual Review Pack (ARP). The Working Group asked the modelling support consultant to apply these changes.

Question Six - The current methodology uses the latest Long Term Development Statement as the data source used for identifying generation dominated areas. The Working Group still believes that this is the best source of available data; do you agree? If not, what alternative sources do you believe should be used?

6.15 The following table provides a breakdown of responses to this question by respondent type.

| Respondent Type | Is the LTDS the best source of available data for identifying generation dominated areas? |                       |       |    |
|-----------------|---|-----------------------|-------|----|
| Respondent Type | Yes   | Unsure/ No<br>Comment | Total |    |
| DNO             | 6   | 0                     | 0     | 6  |
| Supplier        | 0   | 0                     | 2     | 2  |
| IDNO            | 0   | 0                     | 1     | 1  |
| Generator       | 0   | 1                     | 0     | 1  |
| Total           | 6   | 1                     | 3     | 10 |

- 6.16 All DNO respondents agreed that the Long Term Development Statement (LTDS) was the best source of data, with several highlighting that it is in the public domain and thus available to customers.
- 6.17 One respondent suggested that they do not believe that the Long Term Development Statement is the best source of information, as it does not appear (and does not claim) to be fit for the purpose of determining GDUoS credits. The Working Group discussed this comment all group members disagreed, noting that in their

view the LTDS is the best available source of information.

6.18 Two respondents questioned whether the data in the LTDS is accurate and robust.

The Working Group noted this and observed that welcome identification of areas where there are believed to be inaccuracies.

Question Seven - The generation growth was previously based on the DCPR5 Forecast Business Planning Questionnaire assumptions. The Working Group is now proposing to update the generation growth using RIIO-ED1 business plan growth forecasts used to calculate the timescales for generation dominance of each substation. Do you believe that there are any alternative sources for this information that would be preferable?

- 6.19 Eight of the ten respondents to this question did not suggest an alternative data source.
- 6.20 One respondent stated that they would prefer that actual data be used. The Working Group noted that the use of actual data had been discussed against an earlier consultation question.
- 6.21 Another respondent suggested that, due to previous inaccuracies in the published data and the fact that the methodologies and assumptions used are not clear or readily available for independent scrutiny, an independent growth forecast by Ofgem could be a better approach. The Working Group discussed this suggestion and noted that DNO forecasts are based on the best available data at the time, taking into account government forecasts and planned policy. The current source data for the DNO forecasts is reviewed by Ofgem as part of the price control mechanism.

Question Eight - The current methodology uses the size of the installed generation plant. The Working Group has identified that in some circumstances this can trigger a generation dominated area even though there is not HV export capacity at that primary. It is felt that the methodology would be improved by using the observed maximum generation output. Do you agree with the change to the legal text (paragraph 146B of the legal text) to enable this?

6.22 The Working Group noted that eight respondents to this question agreed, whilst two had no comment. One respondent suggested that the legal text should refer to the

observed maximum generation 'export' rather than the observed maximum generation 'output'. The group discussed this comment and agreed that rather than using the word 'output' it should be 'exported'; the legal text was updated accordingly.

Question Nine - The CP introduces six new CDCM tariffs and thirty-six LDNO discounted tariffs. These additional tariffs could impact the use of other industry data and systems, for example line loss factor classes used in settlement. Do you foresee any issues with the implementation of the additional tariffs?

- 6.23 Six respondents to this question either had no comments or did not foresee any implementation issues. Four respondents highlighted concerns around the availability of spare Line Loss Factor Classes (LLFCs).
- 6.24 The Working Group observed that other DCUSA DCPs are resulting in additional LLFCs needing to be used and the issue is likely to become increasingly problematic over time. It was noted that a BSC change would need to be raised to introduce additional LLFCs. It was observed that as it would currently stand it is likely that the costs of implementing the BSC Change would outweigh the benefit of introducing the generation dominated area proposal.
- 6.25 With regards to DCP 137, the impact of limited LLFCs is unlikely to materialise in the short term, as although six new DNO tariffs will be introduced it is about whether there are any HV customers on IDNO tariffs connected to a Generation Dominated Area. It is unlikely that there will be thirty-six (i.e. all IDNO tariff combinations) of these types of customer in any IDNO areas in the short term. The Working Group noted that in the longer term, the currently ongoing settlement reform work may mean that the number of LLFCs available is removed as an issue.

# Question Ten - Do you agree that the demand growth rate of 1% should continue to be used? If not, how should this value be forecast?

6.26 The following table provides a summary of the responses to this question by respondent type.

| Respondent Type | Do you agree that the demand growth rate of 1% should continue to be used? If not, how should this value be forecast? |    |            |       |
|-----------------|---|----|------------|-------|
|                 | Yes   | No | No Comment | Total |
| DNO             | 6   | 0  | 0          | 6     |

| Supplier  | 0 | 2 | 0 | 2  |
|-----------|---|---|---|----|
| IDNO      | 0 | 0 | 1 | 1  |
| Generator | 0 | 1 | 0 | 1  |
| Total     | 6 | 3 | 1 | 10 |

- 6.27 All DNO respondents supported the use of a 1% growth rate.
- 6.28 One generator respondent suggested that actual data should be used instead. The Working Group discussed this comment and noted that the 1% demand growth is an expected long term demand growth used within the charging methodology and it reflects the rate of demand growth that has been seen in the longer term.
- 6.29 Two respondents suggested that there should be consistency between the demand and generation growth rates. In response to this suggestion, the Working Group noted that generation growth reflects new technology far more than demand growth does; therefore, it is the view of the group that it is appropriate to use long term demand growth against more recent forecasts of generation growth.

Question Eleven - If DCP 137 is approved, is the proposed implementation date of 1 April 2015 acceptable? If not, please provide your preferred implementation date and supporting rationale.

- 6.30 Four respondents to this question supported the proposed implementation date of 1 April 2015. One respondent stated that they did not support the change and the remaining four respondents suggested that there should be a later implementation date to allow a sufficient notice period.
- 6.31 The Working Group discussed the implementation date and noted that whilst that April 2015 is achievable there is a potential issue with the settlement systems and the restriction of Line Loss Factor Classes, the impact of which needs to be understood.

#### Question Twelve - Are there any unintended consequences of this proposal?

- 6.32 Six respondents to this question did not specify any unintended consequences.
- 6.33 Another respondent reiterated their concern regarding the limited number of available LLFCs.
- 6.34 One respondent suggested that the proposal will create further uncertainty for

distributed generators. Another further expanded on this explaining that some customers may find that the primary substation they are connected to had been identified as likely to become generation dominated in one year, receiving a reduced credit, then the forecast may change the following year where this is no longer the case, this could leave some customers feeling unfairly charged and visa-versa. The Working Group discussed this comment and noted this could be a consequence of the methodology but it is the view of the group that this is neither positive nor negative in its effect, in that it reflects conditions at the primary substation.

Another respondent noted that under DCP 137 rebates will not be given. The respondent suggested it would not be fair or equitable for a generator at a non GDA primary that was never forecast to become GDA to receive credits, conversely, whilst a generator at a primary that was forecast to become GDA but never did would not receive credits nor would they receive a 'rebate'. The Working Group discussed this comment and noted that a substation may cease to be generation dominated because of the affect that it had been previously classified as generation dominated and this causing the desired effect or reducing generation. It was observed that refunds where a substation ceases to be generation dominated will not be applicable. This is because the reason you are paying credits is to remove the need to reinforce. Charges are based on creating incentives to behave in ways that will reduce network costs using forward looking approach.

# Question Thirteen - Do you consider that the proposal better facilitates the DCUSA objectives?

6.36 Six of the respondents' agreed that the proposal better facilitates the DCUSA Objectives. The following table details the objectives that were specifically mentioned as being better facilitated.

| DCUSA General | No. Of Respondents that | DCUSA Charging | No. Of Respondents that |
|---------------|-------------------------|----------------|-------------------------|
| Objectives    | agree it is better      | Objectives     | agree it is better      |
|               | facilitated             |                | facilitated             |
| Objective 1   | 2                       | Objective 1    | 2                       |
| Objective 2   | 1                       | Objective 2    | 1                       |
| Objective 3   | 1                       | Objective 3    | 3                       |
| Objective 4   | 0                       | Objective 4    | 3                       |
| Objective 5   | 0                       | Objective 5    | 0                       |

6.37 The remaining four respondents did not agree that the objectives were better

facilitated, with one respondent stating that the proposal is detrimental to a number of the DCUSA objectives.

# <u>Question Fourteen - Are there any alternative solutions or matters that should be considered?</u>

- 6.38 Eight of the respondents to this question did not identify any alternative solutions or matters.
- 6.39 One respondent suggested the use of the actual generator demand balance on an annual basis in conjunction with publicised historic trends and movements, together with accepted and open connection offers. The Working Group discussed this suggestion and observed that the DCUSA Charging Methodologies are currently based on forecasting long run costs and not on actual accounts based costs. The purpose of this is to provide a signal for driving efficient use of the network.
- 6.40 Another respondent suggested that there is no need for the proposal or the consideration of any alternative solutions, bearing in mind that the number of generation dominated areas, at a national level was reported by the MIG GDA Sub group to be less than 5% and is still shown in this change proposal to be less than 5%, having grown by only half of 1% over 2 years. In response to this comment the Working Group noted that the CP must be assessed based on whether it better meets the DCUSA objectives.

#### Question Fifteen - Do you have any further comments?

6.41 One respondent stated that they would like to note that the overall impact on the changes as a result of this change are minimal, and this change relies upon suppliers passing on this change in charge to the customer so the customer received the locational cost signalling and incentive to efficiently use the network. However, this may become increasingly important as the networks develops overtime. In response the Working Group noted that the CP must be assessed based on whether it better meets the DCUSA objectives.

#### 7 WORKING GROUP ASSESSMENT OF DCP 137

7.1 The DCP 137 Working Group discussed the proposal over a number of meetings, taking into account the responses received to the two DCP 137 industry consultations. The topics discussed by the Working Group and the group's conclusions are detailed below.

#### **Demand and Generation Growth Rates**

7.2 Demand and generation growth rates are used in the calculation to forecast whether substations are generation dominated.

- 7.3 Both growth rates were previously derived using DPCR5 business planning forecasts and LTDS data, and in the case of the demand growth rate this was also consistent with the assumptions used elsewhere.
- 7.4 The growth rates have since been reviewed against RIIO-ED1 business plan forecast data and new values have been derived.
- 7.5 Demand growth rates were previously set at 1% and used by all DNOs. Using data from the RIIO-ED1 business plans enables demand growth rates that could be set so that they are specific to each network area.
- 7.6 Generation growth rates specific to each network area are currently used in the calculation to determine generation dominated areas. These growth rates have been updated to take into account the DNOs latest generation forecasts used in RIIO-ED1 business plans.
- 7.7 Both demand and generation calculations only use forecasts of the demand or generation connected at HV and LV, and specifically excludes any demand or generation connected at EHV. This is consistent with the need to identify areas where primary substations will need reinforcement due to growth in HV and LV generation.
- 7.8 The change in the HV and LV demand and generation growth forecasts is detailed in the following table.

| DNO area | Revised Demand<br>growth (%) ED1<br>period<br>(previously 1%<br>growth used) | Previous<br>generation<br>growth (%)<br>DPCR5 period | Revised<br>Generation<br>growth (%)<br>ED1 period |
|----------|--|--|---|
| ENW      | 1.28   | 12.9   | 12.47   |
| NPG NEDL | 0.94   | 15.4   | 12.10   |
| NPG YEDL | 1.00   | 14.7   | 14.78   |
| SEPD     | 10.87  | 4.3  | 43.85   |
| SHEPD    | 6.81   | 16.3   | 18.57   |
| SPD      | 2.91   | 23.1   | 25.75   |
| SPM      | 1.37   | 6.4  | 10.02   |

| UKPN EPN | 2.07 | 10.4 | 18.22 |
|----------|------|------|-------|
| UKPN LPN | 1.67 | 10.1 | 17.39 |
| UKPN SPN | 0.54 | 26.5 | 9.13  |
| WPD EM   | 5.14 | 10.7 | 24.41 |
| WPD WA   | 3.52 | 6.1  | 26.80 |
| WPD WE   | 5.74 | 6.2  | 30.70 |
| WPD WM   | 2.95 | 7.6  | 27.40 |

- 7.9 The range of demand growth percentage provided by DNOs (0.54% to 10.87%) is significantly less than the generation growth percentages (9.13% to 43.85%). Consequently, the Working Group feels that it is still appropriate to continue to use the same demand growth percentage for all DNOs. The Working Group recommends that the demand growth percentage that should be used by DNOs is 1.0%. Although this is less than the average value provided by DNOs, it is representative of the long term demand growth seen by DNOs and is consistent with the growth used within the EDCM.
- 7.10 The Working Group believes, having considered the consultation response, that the use of the latest business plan data for establishing the growth rates is appropriate. It was noted that there is insufficient detail in the forecasts to establish separate minimum and maximum growth rates for demand and generation.

## **Identifying Generation Dominated Area Substations**

- 7.11 Under DCP 137 the amount of credits that HV generators received is reduced based on a forecast of when the primary substation that the generator is connected to is expected to become generation dominated.
- 7.12 The Long Term Development Statement (LTDS), which is a document all DNOs are required to publish in accordance with their distribution licence, contains the current view of each DNO's primary substations. This information needs to be combined with growth forecasts to create a list of those primary substations that are expected to become generation dominated over the coming years.
- 7.13 The Working Group notes that the export values in the LTDS are based on agreed export capacity, not on whether the site actually exports energy. As such there may be sites with reasonably high agreed export capacities that do not actually use that capacity; therefore, the export values in the LTDS will not reflect actual activity at the

substation.

7.14 On considering this the Working Group decided that it would be appropriate to allow some flexibility so that DNOs could conduct the test using the 'Total Installed Generation Capacity' or where appropriate the 'Observed Maximum Generation Output', of the HV and LV generators connected to the primary substation.

7.15 This flexibility would allow DNOs to further analyse substations that were showing as generation dominated to ensure that this was likely to be the case. The Working Group believe that credits should only be reduced if the tipping point to generation dominated was to materialise.

#### **New Tariffs Introduced by DCP 137**

- 7.16 DCP 137 will introduce six new CDCM DNO tariffs, namely:
  - HV Generation Intermittent Low GDA
  - HV Generation Intermittent Medium GDA
  - HV Generation Intermittent High GDA
  - HV Generation Non-Intermittent Low GDA
  - HV Generation Non-Intermittent Medium GDA
  - HV Generation Non-Intermittent High GDA
- 7.17 HV generators located in generation dominated areas will be allocated to one to the above tariffs based on how soon it is forecast that the primary substation to which the generator is connected will become generation dominated. HV generators that are not in a generation dominated area will remain on the existing HV Generation Intermittent or HV Generation Non-Intermittent tariffs.
- 7.18 For each of the new DNO tariffs introduced by DCP 137 there are also six corresponding LDNO discounted tariffs. LDNO discounted tariffs are provided for each of six LDNO network point of connections where HV generators could be present. These are HV, HV plus, EHV, 132/EHV, 132 and GSP connections. This means that the total number of LDNO discounted tariffs introduced by DCP 137 is 36.
- 7.19 These tariffs enable LDNOs to mirror the appropriate DNO's generation tariffs if the upstream DNO has a generation dominated primary substation and to also mirror the appropriate DNO's generation tariffs if the LDNO has identified one of their primary

substations is generation dominated.

# **Information for Generators**

7.20 The Working Group proposes that HV Generation Customers will be able to identify the primary substation to which they are connected if the DNO forecasts that the substation will become generation dominated in 10 years. The DNOs will publish a supporting table in their 'Schedule of charges and other tables' spreadsheet that is published to support their Charging Statements. This supporting table will list the substations and associated MPANs that are deemed to be generation dominated within the 10 year time period.

#### **Application of DCP 137**

7.21 Once a substation is deemed to be generation dominated within the 7½ year window then all HV generators connected to that substation will receive the reduced credits determined by the tariff. The application of tariffs will therefore not just include new HV generators that might have caused generation dominance but also any original generators connected prior to the substation becoming generation dominated.

#### **Adjustments to Forecasts**

- 7.22 Each year DNOs will review the primary substations to check whether substations are forecasted to be generation dominated. Therefore, if a generator is connected to a primary substation that changes its status this will be reflected in the tariffs to the appropriate HV generators for the next charging year starting on the 1 April.
  - 7.23 The Working Group noted that a consultation respondent highlighted concerns that credits will not be refunded if there is an incorrect classification of generation dominant. The Working Group discussed this topic and noted that incorrect classification would be difficult to identify. The key feature of DCP 137 is to reduce or remove credits where a need to reinforce is predicted. As a consequence of removing credits, generation dominance could reduce and the need to reinforce be avoided. This would not be incorrect classification but rather the CP having the impact that it was intended to have. Also generators that may have changed their behaviour as a result of being classified as being in a generation dominated area could have no production to offer credits against.

#### **Line Loss Factor Classes**

7.24 The Working Group noted that several consultation respondents highlighted that there are a limited number of available LLFCs. The Working Group acknowledges that there is an associated risk in MDD with the reducing number of available LLFCs; however, with regards to DCP 137 the impact of limited LLFCs is unlikely to materialise in the short term. Although six new DNO tariffs will be introduced, the 'mirrored' use of these tariffs by LDNOs will be determined by whether there are any embedded HV customers connected to a Generation Dominated Area. There are none identified at the current time and it is thought very unlikely that there will be thirty-six (i.e. all IDNO tariff combinations) of these types of customer in any network areas in the short term.

- 7.25 The Working Group noted that the introduction of additional LLFCs in MDD is an area of work that sits within the scope of the Balancing and Settlement Code and that there have been discussions on removing this as an issue over many years. It is also recognised that the issue identified in the response is already there if all current CDCM available tariff combinations were used by embedded LDNOs. The current approved CDCM methodology would require over 2,000 LLFCs, double that available, if all tariffs were supported.
- 7.26 While the Working Group is not aware that a longer term solution is being progressed, Elexon have identified the option that an LDNO could request an additional Distributor Id from the Supplier Volume Group (by submitting a request for an additional Market Participant Id in accordance with BSCP509). This option would solve the issue should it arise.

#### 8 THE CHARGING METHODOLOGY MODELS

- 8.1 The Working Group worked with a modelling support consultant to update the DCUSA Charging Methodology Models to implement the proposed DCP 137 solution. The following DCUSA Models have been updated; these are provided as Attachment 8:
  - The Common Distribution Charging Methodology (CDCM) Model
  - The Forward Cost Pricing (FCP) EHV Distribution Charging Methodology (EDCM) Model
  - The Long Run Incremental Cost (LRIC) EHV Distribution Charging Methodology (EDCM) Model

• The Annual Review Pack (ARP)

#### 9 IMPACT ASSESSMENT

9.1 The updated DCUSA Charging Methodology Models have been used to calculate the impact of DCP 137. A set of spreadsheets showing the impact DCP 137 on CDCM tariffs for each DNO area is provided as Attachment 9.

9.2 The following table provides an overview of the results. Note, the calculations are based on data for the 2014/15 Charging Year.

| DNO Area | Payments to all | Payments to all | Reduction in         | Number of   | Number of  |
|----------|-----------------|-----------------|----------------------|-------------|------------|
|          | HV connected    | HV connected    | payments to HV       | Substations | generation |
|          | generation over | generation over | connected            |             | dominated  |
|          | 2014/15         | 2014/15 under   | generation over      |             | areas      |
|          |                 | the DCP 137     | 2014/15 under the    |             |            |
|          |                 | solution        | DCP 137 solution.    |             |            |
|          |                 |                 | This also represents |             |            |
|          |                 |                 | the reduction across |             |            |
|          |                 |                 | demand tariffs       |             |            |
| ENWL     | -£3,480,156     | -£1,630,835     | £1,849,321           | 363         | 21         |
| NPG NEDL | -£2,539,755     | -£2,031,629     | £508,126             | 265         | 14         |
| NPG YEDL | -£2,324,287     | -£1,416,680     | £907,606             | 506         | 30         |
| SEPD     | -£3,258,172     | -£2,682,399     | £575,773             | 592         | 3          |
| SHEPD    | -£5,083,289     | -£4,768,996     | £314,293             | 406         | 27         |
| SPD      | -£3,111,501     | -£2,828,631     | £282,869             | 417         | 27         |
| SPM      | -£1,443,563     | -£1,344,088     | £99,475              | 619         | 16         |
| UKPN EPN | -£3,806,818     | -£3,400,876     | £405,942             | 463         | 30         |
| UKPN LPN | -£731,821       | -£633,740       | £98,081              | 104         | 4          |
| UKPN SPN | -£1,406,396     | -£1,406,396     | 0                    | 238         | 1          |
| WPD EM   | -£2,870,988     | -£2,690,180     | £180,808             | 383         | 52         |
| WPD WA   | -£1,475,933     | -£1,461,613     | £14,320              | 188         | 3          |
| WPD WE   | -£619,518       | -£615,870       | £3,648               | 323         | 2          |
| WPD WM   | -£936,330       | -£934,226       | £2,104               | 115         | 8          |
| Total    | -£33,088,527    | -£27,846,159    | £5,041,486           | 4,982       | 238        |

9.3 The Working Group has reviewed the impact assessment data and notes the following points:

Impact on CDCM Generation Tariffs:

- The credits paid to HV connected generators that are connected to Generation Dominated Primary Substations are reduced.
- There is no reduction in the payments to generators in the UK Power Networks' SPN area as the one area that is identified is forecast to be generation dominated area in 10 years and therefore the generation in that area will still receive the full credit.

Impact on CDCM Demand Tariffs:

 The reduction in credits paid to generators is reflected in a consequential reduction in demand tariffs

• The impact on individual CDCM Demand tariffs is minimal

Impact on EDCM Tariffs:

- This change is not expected to affect site specific EDCM charges. The EDCM model has been revised to calculate LDNO discounted tariffs for HV generators embedded in LDNO networks.
- 9.4 It is noted that, as would be expected, the biggest impact of DCP 137 will be seen by HV generators that are connected to primary substations that are, or are expected to be, generation dominated. Whether the generator is classed as being in a low, medium or high generation dominated area will impact the amount by which its credits are reduced.
- 9.5 Prior to the introduction of the CDCM, HV and LV generators did not receive any credits as a component of the Distribution Use of System charges. The Working Group felt that there was no ongoing entitlement to receive credits and that generators' business decisions should not be based on their continuation. The Working Group also noted that 'refunds' of credits should not be paid in future years if it is established that the generation dominance of any primary substation did not materialise.
- 9.6 The spreadsheet provided as Attachment 10 lists the specific primary substations forecast to be generation dominated within 2½, 5, 7½ and 10 year time periods. This spreadsheet was issued as part of both industry consultations so that respondents would be able to identify any impact upon themselves.

### 10 DCP 137 - WORKING GROUP CONCLUSIONS

10.1 The Working Group members are supportive of the implementation of DCP 137.
Credits to generators are funded by demand customers and Working Group members believe that it would be inappropriate to continue paying these credits where generators are driving the need to reinforce the network. The implementation of DCP 137 would therefore make DUoS prices more cost reflective.

#### 11 PROPOSED LEGAL TEXT

11.1 The proposed legal drafting of DCP 137 has been considered by the Working Group,

and reviewed by Wragge & Co, and is provided as Attachment 1.

#### 12 EVALUATION AGAINST THE DCUSA OBJECTIVES

12.1 The majority of the Working Group consider that the following DCUSA Objectives are better facilitated by DCP 137.

# Charging Objective 1<sup>1</sup> and General Objective 3<sup>2</sup>

12.2 The CPbetter meets DCUSA Charging Objective 1 and General Objective 3 by satisfying the licence obligation on Distribution Network Operators (DNOs) to review the charging methodology and bring about changes to improve the methodology.

## Charging Objective 2<sup>3</sup> and General Objective 2<sup>4</sup>

12.3 The CP better meets Charging Objective 2 and General Objective 2 by facilitating competition through more cost reflective charges for generation.

# Charging Objective 3<sup>5</sup> and General Objective 1<sup>6</sup>

12.4 The CP better meets Charging Objective 3 by removing or reducing the incentive for HV generators to export energy at primary substations which are currently or are likely to become generation dominated. This will result in tariffs that are more reflective of the costs incurred by the DNO in running their networks. It will also result in less expenditure by DNOs on reinforcing their networks, better meeting General Objective 1.

#### Charging Objective 4<sup>7</sup>

12.5 The CP better meets Charging Objective 4 by producing tariffs that reflect the degree to which a DNO's network is generation dominated and gradually removes credits to

<sup>&</sup>lt;sup>1</sup> That compliance by each DNO Party with the Charging Methodologies facilitates the discharge by the DNO Party of the obligations imposed on it under the Act and by its Distribution Licence.

<sup>&</sup>lt;sup>2</sup> The efficient discharge by the DNO Parties and IDNO Parties of obligations imposed upon them in their Distribution Licences.

<sup>3</sup> That compliance by each DNO Party with the Charging Methodologies facilitates competition in the generation and supply of electricity and will not restrict, distort, or prevent competition in the transmission or distribution of electricity or in participation in the operation of an Interconnector (as defined in the Distribution Licences).

<sup>&</sup>lt;sup>4</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.

<sup>&</sup>lt;sup>5</sup> That compliance by each DNO Party with the Charging Methodologies results in charges which, so far as is reasonably practicable after taking account of implementation costs, reflect the costs incurred, or reasonably expected to be incurred, by the DNO Party in its Distribution Business

<sup>&</sup>lt;sup>6</sup> The development, maintenance and operation by the DNO Parties and IDNO Parties of efficient, co-ordinated, and economical Distribution Networks

<sup>&</sup>lt;sup>7</sup> That, so far as is consistent with Clauses 3.2.1 to 3.2.3, the Charging Methodologies, so far as is reasonably practicable, properly take account of developments in each DNO Party's Distribution Business.

generators as the growth in distributed generation increases.

#### 13 IMPLEMENTATION

13.1 DCP 137 is classified as a Part 1 matter and therefore will go to the Authority for determination after the voting process has completed.

13.2 The implementation date, subject to Authority approval, is 1 April 2015.

#### 14 ENGAGEMENT WITH THE AUTHORITY

14.1 Ofgem has been fully engaged throughout the development of DCP 137 as a member of the Working Group.

#### 15 PANEL RECOMMENDATION

- 15.1 The Panel approved this Change Report on 20 August 2014. 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 137.
- 15.2 The timetable for the progression of the Change Proposals is set out below:

| Activity                              | Target Date       |
|---------------------------------------|-------------------|
| Change Report Approved by DCUSA Panel | 20 August 2014    |
| Change Report Issued for Voting       | 22 August 2014    |
| Voting closes                         | 8 September 2014  |
| Change Declaration                    | 10 September 2014 |
| Authority Decision                    | 15 October 2014   |
| CP Implemented                        | 1 April 2015      |

#### 16 NEXT STEPS

- 16.1 Parties are invited to consider the proposed amendment (Attachment 1) and submit their votes using the Voting form (Attachment 2) to <a href="mailto:DCUSA@electralink.co.uk">DCUSA@electralink.co.uk</a> by 8

  September 2014.
- 16.2 If you have any questions about this paper or the DCUSA Change Process please contact the DCUSA by email <a href="mailto:DCUSA@electralink.co.uk">DCUSA@electralink.co.uk</a> to or telephone 020 7432 2842.

#### **APPENDICES:**

Attachment 1 – DCP 137 Legal Drafting

- Attachment 2 Voting Form
- Attachment 3 MIG Generation Dominated Areas Report
- Attachment 4 DCP 137 CP Form
- Attachment 5 DCP 137 Consultation One Documents
- Attachment 6 Generation Dominated Areas Working Procedure
- Attachment 7 DCP 137 Consultation Two Documents
- Attachment 8 DCP 137 Models
- Attachment 9 Impact Assessment
- Attachment 10 List of GDA Primaries