



## Change Proposal Circular

### CPC00688: Impact Assessment of DCP0047

#### Responses for DCP0047 'Profiling and Settlement Review Group proposals'

##### Summary of Responses

Organisation	Capacity Organisation operates in	Proposal 1			Proposal 2		
		Agree	Impact?	Time to implement	Agree	Impact?	Time to implement
Power Data Associates Ltd	Meter Administrator	Yes	No	N/A	Yes	No	N/A
EDF Energy Networks	EDF Energy Networks (EPN) plc, EDF Energy Networks (LPN) plc, EDF Energy Networks (SPN) plc, EDF Energy (IDNO) Ltd (EDFI	Yes	No	N/A	Yes	No	N/A
TMA Data Management Ltd	HHDC, HHDA, NHHDC and NHHDA	Yes	No	N/A	Yes	No	N/A
Electricity North West	LDSO	Yes	No	N/A	Yes	No	N/A
Scottish Power	Supplier	Yes	Yes	6 months	Yes	Yes	6 months
Scottish and	Supplier/Generator/ Trader /	No	Yes	4 - 6 months	No	Yes	6 months



#### Any Questions

If you have any queries,  
please contact:  
**[CCC@elexon.co.uk](mailto:CCC@elexon.co.uk)**

Or contact:

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Summary of Responses							
Southern Energy	Party Agent / Distributor						
British Gas	Supplier	Yes	Yes	1 month	No	Yes	3 months

Questions	
<b>1</b>	Do you agree with the proposals: <ul style="list-style-type: none"> <li>Proposal 1. Twice Yearly Profile Production?</li> <li>Proposal 2. Cost-Reflective Application of GSP Group Correction?</li> </ul>
<b>2</b>	Is your organisation impacted by the Twice Yearly Profile Production proposal (proposal 1)?
<b>2a</b>	If yes, in which role is your organisation impacted (e.g. Supplier, HHDC, etc)?
<b>2b</b>	Please explain what the impact is.
<b>3</b>	Is your organisation impacted by either of the Cost-Reflective Application of GSP Group Correction proposals (proposals 2)?
<b>3a</b>	If yes, in which role is your organisation impacted (e.g. Supplier, HHDC, etc)?
<b>3b</b>	Please explain what the impact is.
<b>4</b>	How much notice would you need to implement proposal 1, Twice Yearly Profile Production, if approved (from the date that the committee decision is made)?
<b>5</b>	How much notice would you need to implement proposal 2, Cost-Reflective Application of GSP Group Correction if approved (from the date that the committee decision is made)?
<b>6</b>	Please provide details of the associated costs on your organisation to implement proposal 1, Twice Yearly Profile Production proposal.
<b>7</b>	Please provide details of the associated costs on your organisation to implement proposal 2, Cost-Reflective Application of GSP Group Correction.
<b>8</b>	Do you have any other comments or suggestions for alternative solutions?

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Organisation	Agree proposals?	Comments
EDF Energy Networks	1 – Yes	Q2: No

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	2 – Yes	Q3: - No
Power Data Associates Ltd	1 – Yes 2 – Yes	<p>Q2: No</p> <p>Q3: No</p> <p>Q8:</p> <p>Twice Yearly profile production</p> <p>Fully support the production more than once a year and for use promptly in the successive period. There is massive change occurring in the NHH market, particularly in the PC5-8, but that also impacts the PC3-4, market with the fitting of advanced meters. The government intention is to give customers increased information about their consumption which in turn will influence the customer to change their pattern of use.</p> <p>The other ELEXON analysis of requiring HH data from Advanced meters to enter settlement would have a significant impact on PC5-8 profiles. There will be a small rump of customers for which an advanced meter will not be fitted – due to technical or commercial issues – which will need an appropriate profile, although the sample and number of customers will be so small that a revised approach will be required.</p> <p>The enhanced Profile Administrator systems and processes should be utilised to enhance settlement accuracy. Some suppliers may be concerned that they have priced customers' consumption based on a 'known' profile into the future, yet the profile used in settlement changes, leaving them slightly exposed to this change – this could be addressed by 'capping' the degree of change to ensure nothing excessive occurs. Or ignored on the basis that they were always exposed to the Group Correction anyway, which they would have priced in somehow, and many customer do not start/end contracts co-incidental with the current publication timetable of revised profiles.</p> <p>Cost-Reflective Application of GSP Group Correction</p> <p>Support this proposal, with a few considerations. Fundamentally the settlement system should reflect the correct cost signals to suppliers, and in turn customers.</p> <p>1 Not sure of the impact of the scaling factors.</p> <p>The paper (para 8.4) states that the level of scaling factors is irrelevant, which may be true at this stage, but if the proposal proceeds there will need to be further analysis to demonstrate the appropriate levels and allocation to respective CCCs.</p> <p>2 Accounting for Distributors' Operational Losses</p> <p>DPRC5 has required Distributors to treat operational losses (e.g. substation lights, small power, heating, fans, communications equipment, etc) as metered or settled unmetered consumption. Therefore properly recognised as electricity consumption by Distribution companies and recorded as such in the settlement system. Some Distributors were already doing this others were including this</p>

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energy in the Line Loss factors. This change to ensure all Distributors act consistently should have been effective from 1st April 2010, but therefore may show a step change in “consumption” moving from losses CCC’s to unmetered or metered CCC’s in some GSP Groups.

### 3 Losses Incentive

Not sure of the impact with the losses incentive on Distributors through DPRC5

Ofgem has incentives on Distributors to reduce losses through DPRC5, these are long term measures. Disturbance of the reporting may have unexpected consequences for Distributors (and Ofgem) to this incentive regime.

### 4 Loss Factor granularity

The settlement arrangements introduced in 1998 allow Distributors to define different loss factors for each HH of the day for each different LLFC. Most have used a much simpler approach – if one of the concerns is the inaccuracy of the factors applied each HH then the Distributors should be encouraged to add further detail to their loss factors which apply different factors at different times of the day/day of the week. The facility exists, always assuming the Distributor has the capability to derive a more reflective set of factors.

### 5 Unmetered

See attached slide presentation given to UMSUG in May 2010.

Unmetered has two opportunities for error – one is inventory the other is profile shape.

#### 5.1 Inventory

The inventory submitted to the Distribution Business (UMSO) by the customer affects the overall volume of unmetered energy and affects NHH & HH traded customers. Most UMSOs are actively approaching customers to ensure the inventory is regularly updated and maintained correctly. There are errors of under (and over) declaration, although the likelihood is that the overall effect is under declaration. It would therefore probably be appropriate that HH & NHH unmetered consumption should have a scaling factor applied. The attached presentation (slide 3 & 4) shows the unmetered consumption in each of the GSP Groups for 2008/09 and 2009/10 (using ELEXON data) in most of the GSP Groups the settled consumption increased by 2.8% – this is undoubtedly due to the improvements in inventory quality. This is continuing to improve.

#### 5.2 Profile Shape

The second error comes from the profile shape which is markedly different between the two trading arrangements – see slides 7, 8 & 9. The HH profile reasonably reflects the actual profile, correctly profiling continuous, part night and dusk-dawn switching patterns over all the seasons of the year. A small, but growing number of customers are using Centrally Managed Systems (CMS) which switch

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differing lights at different times, this is also accommodated correctly in the HH arrangements. A larger number of customers are exploring 'part-night' lighting which turns off the lighting between midnight and 05:00 (actual selected times vary). HH trading results in a meaningful HH consumption profile entering the settlement process.

The NHH profiles are based on PC1 (dusk-dawn, part night, dawn-dusk) & PC8 (continuous) with some 'chunking'. This leads to a totally inappropriate profile in settlement. The daily profile, the weekday/weekend, the summer/winter profile are all totally inappropriate. The bulk of unmetered consumption is currently dusk-dawn, which leads to a wide difference between the actual consumption (slide 8) and the NHH settlement profile (slide 9). The difference in reality verses settlement profile will manifest itself in Group Correction. The NHH unmetered should therefore have a significant scaling factor to ensure this inaccuracy is correctly reflected in settlement.

Slide 7 shows the annual consumption profile in the two CE Electricity Distribution areas. In the YEDL area the majority of unmetered is HH traded, in the NEDL area the majority is NHH (believed that only one customer is HH). The graph clearly illustrates the settlement error – particularly in the early hours of the morning. The early hours of the morning, in the summer, is when unmetered consumption will be a significant proportion of the actual energy consumption – much greater than the annual average.

Slide 4 illustrates that there is a significant regional variation across GSP Groups between unmetered consumption trading NHH & HH, this is largely for historical reasons. In the predominantly HH GSP Groups all the significant lighting authorities are trading HH with the few parish & town councils trading NHH. The impact of the error will be greatest in the GSP Groups with a predominance of NHH unmetered, as opposed to those where unmetered is mostly HH traded.

Slide 4 also highlights the consumption which has changed to HH with effect from 1st April 2010. We have activity highlighted the benefits to customers of trading HH as opposed the NHH, a number of suppliers have supported the process by demonstrating the cost differences in their retail rates. We expect further customers to transfer to HH over the next 12 months. Since the slide was prepared we are now acting as Meter Administrator for several lighting authorities in the two Scottish GSP Groups. There is a time lag between decision and action due to the customer/supplier electricity procurement arrangements. Other drivers for customer to make the change come from the Distribution Use of System charges (slide 5) although these are not correctly cost reflective between NHH & HH. Also the customer benefits through the government Carbon Reduction Commitment (CRC) Energy Efficiency Scheme which recognises that HH trading encourages better management by customers of the unmetered energy, this also reflects through into better accuracy in settlement.

### 5.3 Way forward

NHH trading is appropriate for the parish council with 6 street lights, but not for the large local authority with 12.8MW of demand and 54GWh of consumption. Unmetered customers have an average load factor of 49%. Large customers trading NHH lead to a material error of the profiling in a GSP Group.

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		<p>It would be appropriate that the BSC arrangements should require all large unmetered customers to be traded HH as opposed to NHH. The change would need to give sufficient warning for customers to make the appropriate procurement arrangements. The requirement for fitting advanced meters to all P5-8 customers is for 2014, this may be an appropriate milestone, particularly if the profiling work results in all advanced meters having to trade HH.</p> <p>The definition of 'large' unmetered customers is regularly discussed, but linking the demand to the mandatory 'over 100kW' (or 429MWh at 49% load factor) would be perfectly appropriate. We already have MPANs in our portfolio smaller than this. It is often said that customers may simply split their inventory into many smaller parts to keep under any specified threshold, this is always possible, although the standing charges applied by suppliers, procurement organisations, bill validation services, etc. for each MPAN will provide a natural incentive not to follow this approach.</p> <p>There is further detail of the slide presentation in the paper to UMSUG (which was actually discussed in the May meeting);  <a href="http://www.elexon.co.uk/documents/bsc_panel_committees_and_groups/umsug_meeting_2010_-_7_-_papers/impact_of_cdcn_on_ums.pdf">www.elexon.co.uk/documents/bsc_panel_committees_and_groups/umsug_meeting_2010_-_7_-_papers/impact_of_cdcn_on_ums.pdf</a></p>
TMA Data Management Ltd	1 – Yes 2 – Yes	<p>Q2: No</p> <p>Q2a: As Party Agents, we will receive the profile information twice a year instead of once a year in the MDD but it has no adverse impact.</p> <p>Q3: No</p> <p>Q4: No advance notice required</p> <p>Q5: No advance notice required</p> <p>Q6: No cost</p> <p>Q7: No cost</p> <p>Q8: No</p>
Electricity North West	1 – Yes 2 – Yes	<p>Q1 Rationale:</p> <p>1. Moving to a twice yearly regime will make the data more relevant and accurate and be more responsive to customer behaviour, especially in the current climate where we are trying to drive those behaviours. Additionally, this will hopefully reduce the volumes to be reconciled.</p> <p>2. Again, more accurate data will be available in this way, which will become more important as the number of HH customers grow with the advent of smart metering. Consequently, it seems appropriate to assign GSP scaling factors to the appropriate CCC.</p> <p>Q2: No</p> <p>Q3: No</p> <p>Q4: N/A</p> <p>Q5: N/A</p>

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		<p>Q6: N/A</p> <p>Q7: N/A</p> <p>Q8: N/A</p>
<p>Scottish Power</p> <p>Assessor Name:</p>	<p>1 – Yes</p> <p>2 – Yes</p>	<p>Q1 Rationale:</p> <p>1. Given the impending market changes in relation to Smart Metering, AMR compliance by 2014, microgeneration plus feed in tariffs, it is imperative that both the profiles and Settlement provide as up to date information as possible. It would also hopefully identify the impacts and changes in customer behaviour as the new technology is introduced.</p> <p>2. It makes sense to remove any cross subsidy between the HH and NHH markets especially given the potential impact of both AMR and Smart Metering to provide HH data for Settlement purposes.</p> <p>Q2: Yes</p> <p>Q2a: Supplier</p> <p>Q2b: Provision of information to enable the twice yearly profile to be produced. Review of existing processes to assess any changes that are required.</p> <p>Q3: Yes</p> <p>Q3a: Supplier</p> <p>Q3b: Interpretation and understanding of the proposed amended reports. As a result of this we will have to assess changes to our reporting structure and agree new metrics with our Distribution</p> <p>Q4: 6 Months</p> <p>Q5: 6 Months</p> <p>Q6: Costs would be dependent on the mechanism used to collect the profiles and whether or not the sampling process would change. Our preference would be for the minimal change option to be adopted utilising the recent P223 Profile Administration as much as possible.</p> <p>Q7: The key factor that would need to be considered is the number of sites migrating from NHH to HH and which CCCs these sites are operating in. To gain an understanding of the direct GCF costs a full migration plan showing the movement between the CCCs would need to be established</p> <p>Q8: No</p>
<p>Scottish and Southern Energy</p>	<p>1 – No</p> <p>2 – No</p>	<p><b>Proposal 1:</b> Twice yearly profile production</p> <p>With the current uncertainty around SMART metering and the impact on Settlement data and processes, we question if this proposed change is cost effective with the potential limited timescales that profiling will continue to be used.</p> <p>Also, we believe that the volume displacement across AA and EACs because of mid year changes, have not been addressed and will have to be taken into consideration, if this proposal is to be progressed.</p> <p><b>Proposal 2:</b> Cost-reflective application of GSP Group Correction.</p>

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		<p>Whilst we agree to the principle of having a more cost reflective approach, we feel that the DCP as it stands is not fit to go forward as a formal change. There are a few issues which we feel need addressing before this proposal can be taken any further.</p> <ul style="list-style-type: none"> <li>• The data used in the analysis is out of date, i.e., 2003 - 2005 data has been used. A more accurate understanding of the current position would provide a much better basis from which to make further proposals.</li> <li>• The proposal does not take into account all source of error within SVA, e.g., estimated HH data, HH data spikes, metering problems and energisation/de-energisation.</li> <li>• Is it appropriate to scale losses and consumption data the same? Losses are already a measure of error across a system, and in effect it would be applying an error factor to an error factor. It is possible on this basis that the current situation of applying a factor of 1 to NHH Consumption and Losses would need to be assessed and changed.</li> </ul> <p>Q2: Yes  Q2a: Supplier  Q2b: Changes to our systems, processes and further resource requirements.  Q3: Yes  Q3a: Supplier  Q3b: Any changes to the HH scaling factor would require significant changes to SONET, our internal settlements database. There will also be requirements to make amendments to our internal validation reports.  Q4: 4- 6 months. (To meet our IT scheduling timescales)  Q5: 6 months. (To meet our IT scheduling timescales)  Q6: Resourcing costs.  Q7: N/A  Q8: No</p>
British Gas	1 – Yes 2 – No	<p>Q1 Rationale:  1. (see Q2b)  2. (see Q3b)  Q2: Yes  Q2a: Supplier  Q2b: We agree with the proposal to updates profiles on a twice yearly basis as this should improve the accuracy of settlement and ensure more accurate allocation of costs to suppliers. The main benefit will be via the reduction in the length of the profile production process from 2 to 1 year. However we do not believe the profiling approach would identify these sometimes subtle changes in</p>



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		<p>demand behaviour, due to issues with sample size/stability etc. The profiling process is imprecise/subject too many modelling errors/data errors, and we do not believe you can solve these issues via profiling.</p> <p>Q3: Yes</p> <p>Q3a: Supplier</p> <p>Q3b: NHH suppliers bear the full cost of group correction factor regardless of whether the actual inaccuracies are incurred in the HH or NHH market.</p> <p>We believe that more analysis is required to demonstrate the cost reflectivity of increasing the scaling factor for NHH CCCs 20,21,22,34 and 35. In addition we believe that the scaling factor for HH consumption should not remain at 0.0. We believe that there is evidence (experience in gas) that HH customers can be subject to theft, and unregistered sites the same as NHH sites and that an element of group correction should be applied to HH consumption.</p> <p>Q4: One months notice</p> <p>Q5: 3 months notice to be able to identify the impact, and make the necessary amendments/remodelling of our forecasting models.</p> <p>Q6: Minimal cost</p> <p>Q7: Minimal cost</p> <p>Q8: No</p>
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