

## **Reduction of losses via data management and theft reduction practises**

### **1. Introduction**

- 1.1. We recognise that the primary objective of a losses incentive is to incentivise companies to minimise electrical losses as a result of distributing electricity across their networks, probably via targeted investment, design solutions and network optimisation. However, an important secondary objective is for the Distribution Network Operators (DNOs) to exert their influence and work with third parties (such as suppliers) to improve data accuracy and reduce theft and thereby removing the error in the reported losses figure.
- 1.2. The result should be an incentive which encourages DNOs to improve settlement data quality by rewarding corrections whether positive or negative. Whilst continuing to allow suppliers to correct data for the benefit of settlements without adversely impacting a DNO's performance.

### **2. Details of proposed approach**

- 2.1. The strawman approach below has been developed to provide a firm example of a theft/data accuracy losses incentive for debate at the RIIO-ED1 losses working group.
- 2.2. It is not intended to be a finalised proposal that anticipates all of the potential issues that could arise with implementing such an approach, and if implemented it may require further development to avoid any potential unintended consequences.
- 2.3. Potential alternatives that take a different approach could also include "use it or lose" style allowances, with maximum allowances set on a DNO by DNO basis based on the level of theft in a DNO's area.
- 2.4. With all these methods, to alleviate potential volatility in charges the lagging of the mechanism could be retained so that stakeholders have predictability of the impact on allowances.

#### **Approach**

- 2.5. The objective of this incentive is to encourage DNOs to assist with minimising theft of electricity (illegal abstraction) and improve settlements accuracy with improved data processing/error checking processes by moving away from a mechanism which measures units in against units out in totality and rewarding settlement correction - be it positive or negative.
- 2.6. Ensuring that all units being consumed by users are properly accounted for would result in more cost-reflective charges, as any cost which are being avoided by the act of theft are otherwise being recovered from the remainder of the customer base.
- 2.7. The DNO would use its resources to identify MPANs which were incorrectly registered, ensure the accuracy of unmetered supply inventories and metering configurations and reduce theft.
- 2.8. Each erroneous item identified would count in the same way, regardless of whether or not it is a positive or negative correction. This would encourage data improvement effort by DNOs regardless of whether units distributed would increase or decrease as

a result. The size of the correction could also be taken into account by the incentive, so DNOs are encouraged to target the larger errors.

## Outputs

- 2.9. The output under this approach would be the total KWh of data corrections identified by a DNO in a given year, relative to all units distributed through its network.
- 2.10. Performance (i.e. units corrected) could be broken out against specified categories (e.g. Metering, Data & Theft), although this would only be necessary if different incentive rates were to be applied to each (which may not be necessary or justified).
- 2.11. A possible alternative output measurement could be change in group correction factor (GCF), but as with settlements in general, it may be impossible to identify changes in GCF that result from the DNOs activities. This may also suffer from the fact that positive and negative data corrections would cancel out in settlements, but would still bring a social benefit.

## Targets

- 2.12. It may be difficult to establish historic targets due to the lack of data. The approach taken could be to establish an annual league table, with DNOs remunerated based on their performance relative to the industry average corrections rate. Once this incentive has been in place for a set number of years, it should be evaluated to test whether target setting based on historic averages would be more appropriate.

## Measurement

- 2.13. Where the correction requires action by a third party the DNO should be able to count the item within its figures once the third party has been notified.
- 2.14. However, although a mechanism may be required to adjust DNO performance if the third party subsequently identifies that the DNO has made a mistake. This adjustment could be made in a way that discourages inaccuracy by DNOs e.g. a demonstrable error could count double when it is reversed from the DNOs figures.
- 2.15. With all long standing errors found the quantification of the magnitude should be limited in scope to 14 months prior to the date of identification as generally settlements would not be corrected beyond that.
- 2.16. Performance in terms of quantity and magnitude of errors (i.e. KWh corrected) could, if necessary, be measured/recorded against the following categories on a case by case basis:
  - Metering: - CT/VT errors
    - Magnitude of the error should be relatively straight forward to quantify with simple assumptions.
  - Data quality: - Unmetered Supplies
    - Magnitude of the error should be relatively straight forward to quantify with simple assumptions.
  - Data quality: - Registration status
    - If no metering data is available assumed consumption could be based on GSP Group Average EACs.
  - Theft: - Illegal Abstraction

- If no metering data is available assumed consumption could be based on GSP Group Average EACs.

## Rewards / Penalties

- 2.17. A key point about the approach is that the incentive rate should be relatively low, to reflect the fact that, while data improvements do have a benefit, this is significantly lower than the overall benefit from reducing electrical losses.
- 2.18. Given a low incentive rate, it may also be appropriate to introduce relatively narrow caps and collars on the return on regulatory equity (RORE) that DNOs could earn through the incentive. This which would still allow for significant data correction activity but mitigate the potential for unintended levels of upside and downside for individual DNOs that could not plausibly reflect the overall benefits of data correction activity.

## 3. Risks / Benefits

- 3.1. If a league table style approach is adopted this may just be penalising those companies with a good track record to correcting these types of settlement errors whilst rewarding those that currently do not. All DNOs are currently incentivised to work with third parties (such as suppliers) to improve data accuracy and reduce theft equally so theoretically there should not be vast differences.
- 3.2. Dependant on the current state of the DPCR5 losses incentive having a RIIO-ED1 incentive based on quantity and magnitude of errors corrected could create an active disincentive to make these corrections during DPCR5.
- 3.3. This type of incentive arrangement could create difficult relationships between Distributor and Supplier particularly in situations where the DNO is asking the Supplier to correct records when there is an incentive rate for the DNO to correct these which differs from the incentive faced by suppliers (though this could be alleviated by the use of a lower incentive rate compared to the DPCR5 losses incentive).
- 3.4. Typically the provision of detailed and accurate inventories is a condition of the connection agreement with a DNO. If a consumer is found to be in breach of their contractual arrangement the DNO may seek commercial redress rather than be rewarded under an incentive.
- 3.5. This may just reward those companies that had previously managed their commercial arrangements with unmetered supply customers poorly in the past. Although all DNOs have been equally rewarded to do so.

## 4. Evaluation criteria

- 4.1. While we have included some initial thoughts are included below, we expect significant further discussion to take place at the RIIO-ED1 losses working group on 28<sup>th</sup> May 2012.
- 4.2. Consider how this approach might be evaluated according to each of the principles set out below.
  - **Proportionality** – the use of a lower incentive rate to reward data correction activities than is applied to electrical losses would be proportionate with the social benefits of the activity (and the costs to DNOs).

- **Transparency** – the simple output proposed should be transparent to stakeholders in general.
- **Consistency** – the main issue with consistency would be the potential impact past DNO activity has on how easy it is to identify future errors. There may also be difference between DNO regions that make the extent of data errors vary.
- **Credibility** – New DNO data measurement and compliance systems would be needed to ensure data accuracy and enhance credibility. The facility for suppliers to correct any demonstrable DNO errors would also enhance credibility.
- **Clarity and Controllability** – the activity of searching for data errors would be entirely within the control of DNOs, although the extent of data errors in a DNOs area could depend on the activity of other parties (e.g. the extent of theft).
- **Adaptability and Commitment** – the main area which may require adaptation over time would be target setting (once historical data is available that could allow differences between DNO areas to be taken into account).

4.3. Where possible identify any additional evaluation criteria which could be applied to this approach.

## 5. Any additional information

5.1. A “use it or lose it” funding approach would remove the inequalities that will undoubtedly occur if a league table style approach was taken. But it could be difficult to measure the output (i.e. improved data) for the financial outlay as, for example, a DNO could spend money on auditing inventories and not find any errors.