25 June 2004

Andrew Wallace
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By e-mail

Dear Andrew

CONSULTATION ON THEFT OF ELECTRCITY AND GAS

Please find with this letter a response from the UK Revenue Protection Association to your Discussion Document on Theft of Gas and Electricity. I have no objection to this being made publicly available on your web site.

Should you have any queries please feel free to contact me through the Secretariat as below.

Yours sincerely

Neil Wills

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Chairman
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OFGEM CONSULTATION ON THEFT OF ELECTRICITY AND GAS

Response by the United Kingdom Revenue Protection Association (UKRPA)

THE UKRPA

1. The UKRPA is a trade association open to parties involved in detecting and dealing with meter tampering and illegal abstraction of electricity and to providers of products and services to those parties. It is an unincorporated association to which Gemserv Limited provides the Secretariat.

2. The UKRPA does not involve itself directly in the commercial activities of its members or in commercial arrangements between members and, as such, strictly observes the requirements of the Competition Act, 2000.

3. UKRPA members ['the UKRPA'] welcome this consultation and the opportunity to comment on Ofgem's discussion document 85/04 ['the paper']. The following submission, agreed by members, is additional to any individual company submissions which may be made, and comments are largely restricted to the electricity market.

GENERAL

4. The paper sets out reasons why Ofgem feels that it is important that the detection and prevention of energy theft should be carried out. UKRPA members naturally support this. It is unfortunate that not all parties in the competitive electricity market appear to attach the same level of importance to this activity and various perceived deficiencies in the current framework and processes allow that it may not be being done in the most effective and efficient way viewed overall. To answer paragraph 10.2 of the paper, the UKRPA believes that the present arrangements require urgent review and to do nothing is not an option. In particular, some responsible suppliers are active in seeking to fulfill their Licence obligations to detect and prevent whereas others are known not to be – this must not be allowed to continue.

5. This is not to say that all the present arrangements should be torn up and replaced. There is an existing infrastructure of organisations and suitably experienced/qualified staff to carry out what the Industry requires of them. The trick is to identify what needs to be done to make this work better.

6. Paragraph 2.1 of the paper suggests a scope for what the consultation is about, but it is felt that it would be helpful to expand on this. Prevention and detection are covered by the generic term Revenue Protection (RP). 'Traditional' RP work relates to customers who:-

- Interfere with a meter to prevent it accurately recording the amount of energy supplied
- Interfere with the connections to a meter to prevent it accurately recording the amount of energy supplied

- Apply a shunt or device (known as a "black box") to slow, stop or reverse a meter
- Make an unauthorised connection ahead of a meter to create an unrecorded and unmetered supply

To these could be added:-

- Reconnect a 'disconnected' supply (but see 11)
- Take a supply without an expressed or deemed contract (ie a 'supplierless' site)

It should be noted that theft may involve interference with the supplier's meter or with equipment belonging to a Distribution Network Operator (DNO).

Additionally, some (but not all) RP units may also deal with

- Meter defects
- Meter connection errors
- Billing errors

7. As a useful summary it could be said that **RP is about the detection of consumption for which a supplier is (or suppliers in general are) responsible as regards payment but about which they are not aware and are therefore not recovering their costs of supply.**

LEGAL FRAMEWORK

8. In general the legal framework is considered adequate to support RP activity. It should not be lost sight of that **electricity theft is a criminal activity** and, in addition to relevant provisions of the Electricity Act as quoted in the paper, recourse may be made to Sections 1, 13 and 17 of the Theft Act (which allows for greater penalties on conviction).

9. However, the Electricity Act is somewhat perverse as regards paragraph 6 of Schedule 6, which allows a supplier rights of entry to inspect a meter and a DNO rights of entry to inspect lines and plant (which does not include a meter), but not vice versa. Apart from the fact that the majority of domestic meters are currently owned by DNOs, ie they have no right to inspect their own equipment, this means that any party conducting a theft investigation properly requires the authority of both the supplier and DNO as he may be acting on suspicion and may not know what equipment has been interfered with prior to entry.

10. The paper refers also (paragraph 3.14 and Appendix 1) to the ability under paragraph 4 of Schedule 6 for a DNO to recover the value of energy taken if not under a contract with a supplier, and suggests that DNOs cannot do this as "none has published a scheme setting out how they will recover this money". The requirement is actually "to make a scheme providing for the manner in which and the person by whom the value of electricity taken is to be determined" and says nothing about the manner of recovery or publishing anything. There is also a question as to why a DNO should be able to recover the whole value of the supply taken when, in effect, he has only 'lost' that part attributable to DUoS income (see 17)

11. As regards paragraph 5 of Schedule 6 which makes it an offence to reconnect a disconnected supply, Settlements distinguishes between de-energisation, where the meter may be left in place and a supplier continues to be responsible for anything registered on it as a result of reconnection through it, and disconnection, where the meter and/or service is removed. In the former case 'reconnection' is not, strictly, theft and in the latter case no supplier may be responsible, which situation is covered by paragraph 4 (2) a of Schedule 6.

REGULATORY FRAMEWORK

12. Support for RP work provided by the Licence Conditions (LCs) is less satisfactory. The original LCs for PESs and Second Tier Suppliers reflected what Industry working groups had decided pre-1998, namely that the PES distribution business should provide RP Services as an agent to all suppliers in its area, and the RP Code of Practice was written to define the services provided. The new Supply and Distribution Licences issued in 2000 to enable PES business separation changed those arrangements by removing any obligations on the Distributor to detect and prevent theft. Section 3 of the Paper (particularly paragraph 3.9) does not explain why this was done but acknowledges that there are now variations of organisational approach as a result. The UKRPA accepts that to revert to the 1998 arrangements may be difficult, if not impractical, but there are some members who believe that the primary obligation to detect and prevent should be with the DNO (and see 23). However, this is not a consensus UKRPA view

13. If the Distribution LCs are not to change, it is felt that Supply LC16 needs review, which could be by means of a clarifying note or similar instrument rather than effecting changes.

Reasonable steps to detect and prevent

The paper concedes that, as yet, there has been no enforcement by Ofgem of any party's Licence obligations. In any attempt to do so there is likely to be some argument about what are 'reasonable steps'. As a minimum, it is suggested that suppliers should be able to demonstrate that

- they have written into contracts with their Agents a requirement that staff will report any observed interference and take steps to monitor that this requirement is being observed
- their Agents have undertaken suitable training for their staff to be able to recognize such interference and staff have sufficient leeway within their targets to carry out inspection
- they have formal arrangements for the investigation of suspected theft in each ex-PES area in which they have customers, either with the incumbent DNO or another recognized body (see 23 and 25)

The last should ensure that there are no geographic areas where RP activity is not being carried out (which would be unacceptable)

Prevent

Theft cannot really be prevented otherwise it would not take place. However the word may have different interpretation depending on whether its is applied to theft discovered or as yet undiscovered. In the former case 'prevent' could mean stop the specific abuse and deal with the matter (and the RP Code of Practice sets out what should be done in this respect); in the latter it could mean take steps to deter theft generally. There are no specific LCs relating to this latter concept (see 21)

14. There are some other anomalies in LC16, relating to reporting requirements where a meter is not owned by a DNO, which are not considered important. What is important is that the DNO should be informed of proven theft, whether it owns the meter or not, so that it has an audit trail regarding recovery of 'lost' DUoS income by whatever mechanism is agreed in any overall arrangements.

15. LC17, relating to the inspection of meters and supply equipment, is also considered deficient in allowing that a customer who changes supplier within each two year period may escape inspection of equipment which they may have compromised.

MARKET INCENTIVES

16. Paragraph 5.10 of the paper says it all in conceding that the current arrangements do not provide commercial incentives for suppliers to fulfill their Licence obligations – in fact there are positive disincentives which have been admirably brought out in detail in the paper, including the difficulties of entering 'chunks' of historic consumption (identified theft) into Settlement. The UKRPA would support an industry review of this area to identify what might be done to remedy this. For instance, at the 7 June Seminar, two speakers proposed some form of fund into which parties would pay and from which they would be able to draw to make the identification and rectification of theft at least cost neutral, at best to incorporate some element of benefit for a proactive approach. The detail of how this would work, what authority/governance it might have and how compliance might be ensured should be left to a working group of representatives of interested parties to develop.

17. As a part of this any working group would need to be clear about more general aspects of the way in which theft impacts on how Settlement deals with non-technical losses. For instance:-

- where theft is recent the Supplier would be trading on a profile through which the DNO would be paid appropriate DUoS: long term theft might involve an inaccurate EAC where he would not.
- the 14 month secondary reconciliation period does not fit well with long term theft which may have been going on for some years
- this is complicated even more where there has been customer switching and there is a need to allocate losses against different suppliers

As regards the first point, the UKRPA has a paper entitled "Who owns stolen electricity" which elaborates on such points and which is included with this response for information.

18. The paper also makes a case that there are incentives for DNOs arising from detected theft, which might encourage them to provide a default RP service in their area even though the Licence obligation to do so has been removed. However some DNOs do not seem to accept this case and it will be interesting to see their reasoning in responses to the paper. The UKRPA does not speak for DNOs as such but feels that, within any commercial arrangements agreed as above, those DNOs that wish to do so should be able to carry out RP work in their own right and at their own expense irrespective of any expressed or implied contractual arrangements with suppliers, as presently allowed for within the RP Code of Practice (see also 25 about take up of services and 28 about UMS). There could be some difficulties here with Section 6 of Schedule 6 to the Electricity Act (no rights of a DNO to inspect a meter) but, as was noted at the 7 June Seminar, parties seem to be working around this.

MEASUREMENT OF PERFORMANCE

19. In any process of regulatory enforcement or compliance with commercial agreements an important element is to have some robust, consistent and relatively simple measures of performance. The UKRPA applauds Ofgem's attempts to develop questions on performance which meet these criteria but feels that there is still some way to go to get them right, in that questions recently asked were still open to some confusion as to what was meant. This was apparent at the 7 June Seminar where reasons for the variability of results were not fully identified, for instance

- the impact of resources put into RP investigations on the number of cases of theft identified

- the proportions of different sources of suspected theft leads (Agents, Police, public, consumption analysis) and the way that these might have changed over the measurement period

20. The UKRPA therefore supports further work being done to develop better measures within the confines of what its members are permitted to disclose. It was noted at the 7 June Seminar that such data is sensitive to the performance of companies generally and there may be reluctance to provide it, especially if there was any possibility of it being used to compare companies in any statistics to be made public. As regards who should receive the relevant data, provision to Ofgem could address concerns but provision, say, to any other compliance body would need to be covered by some form of confidentiality agreement.

DETERRENCE

21. Deterrence has not featured in past Ofgem consultations and is not evident in this one, but the UKRPA feels that suppliers should have obligations in this respect, albeit that they involve expense which suppliers seem reluctant to incur under the present arrangements. This could be in clarification of the LCs (see 13) or possibly as part of incentives within any 'fund' arrangements (see 16). Deterrent measures include:-

- General publicity as to the dangers and penalties of tampering with equipment
- Prosecution of customers caught stealing
- Robust sealing of all parts access to which could permit interference
- Installation of special measures – so-called security equipment (blocks, concentric cables) to prevent use of a black box

22. At the 7 June Seminar energywatch called for more prosecutions of customers as a deterrent measure. It was clarified that the supplier had an option to refer a case to the Police who, in consultation with the Crown Prosecution Service, would decide whether to prosecute, the level of evidence needing to be beyond reasonable doubt. Alternatively, the supplier could mount a civil case, using evidence on the balance of probabilities. There has never been a large number of prosecutions nationally, but this number has definitely decreased over the last 5 years, as have the number of cases referred to the Police (evidence of this has been provided to Ofgem). Prior to supply competition a successful prosecution had a deterrent effect which benefited the supplier for that area; now it benefits all suppliers in an area, ie the competitors of the supplier bringing what could be a costly action. For this reason most suppliers have a deliberate policy of not prosecuting first time offenders or relatively minor serial offenders. As for the energywatch suggestion that all cases, irrespective of prosecution, should be proven beyond reasonable doubt, this is considered unrealistic. It is the UKRPA's view that the supplier is entitled to pursue restitution from whatever party it considers liable for the costs and losses associated with interference as a civil matter, regardless of whether an 'offence' is reported for prosecution.

PROVISION OF RP SERVICES AND STANDARDS

23. Paragraph 12 of this response referred to who should have the primary obligation to detect and prevent and hence, indirectly, to who should provide RP services. As things currently stand, suppliers would seem to have three options to discharge their obligation in each area in which they have customers

- Take services provided by the DNO in that area, where offered, through the DuoSA
- Set up their own RP operation
- Contract with third party RP service provider

A major concern of the UKRPA relates to the standards of provision of such services. As previously indicated, there is already an infrastructure to do this and it would seem unnecessary for a supplier to 'do his own thing', although he may be commercially and legally free to do so. It is to be hoped that Ofgem would not wish to see suppliers cutting corners in the discharge of their obligations by contracting with 'cheap and cheerful' service providers with inferior standards to those upheld currently by dedicated, trained, qualified and professional RP staff.

24. This is not to say that there might not be different levels of service offered so as to provide a choice (with differential pricing) to suppliers. The minimum level would be to an acceptable standard with incentives to take a higher level built in to any commercial arrangements agreed as in 16.

25. It should be noted that any ability of a supplier not to take services offered by an incumbent DNO might create difficulties for that DNO continuing to provide an RP service. As stated at the 7 June Seminar, this is equivalent to what is happening to DNOs now with competition in provision of metering services (although in that case there are LCs which require the DNO to provide these services). There are Distribution Price Control Review (DPCR) implications of this and it may be that there are also such implications arising from any outcome to this consultation. DNOs will be concerned that there is alignment with decisions reached in discussions on the DPCR so that they are not disadvantaged, and this should be considered by any working group set up to consider future arrangements.

THE RP CODE OF PRACTICE AND STANDARDS

26.One vehicle for the maintenance of standards is to have an underpinning Code of Practice which defines what is to be done and to what service levels. The RP Code of Practice ['the Code'] was written for this purpose, but relates to the arrangements agreed in 1998 for the Distributor to provide services, and also does not take account of changes effected by the Utilities Act and separation of PES businesses. It requires revision and the UKRPA would support the formation of - and wish to have representatives on - an Industry working group to do this. This group would need to make recommendations about the authority and governance of any new Code (see 27) and as to whether there should be a body to check compliance with it, possibly along the lines of the Registration Authority in the case of the Meter Operation Code of Practice Agreement (which has several parallels with the RP Code).

27.In fact, some limited work in respect of revision has already been done. It is not true, as the paper suggests, that the Review Committee called for within the Code "never met". In fact it did so twice, following a national seminar to present the various aspects of the Code. Meetings were abandoned because the recovery of secretariat costs was unworkable. It did produce some recommendations for changes arising from the Utilities Acts, and the UKRPA still holds a copy of this which it would be happy to pass to any working group.

28.It should be noted that DNOs have agreed to provide meter services of last resort under the Urgent Metering Services (UMS) agreements with suppliers. Clause 4.8 of the UMS agreements allow that a DNO providing emergency services need not restore supply where it thinks that a fault is due to illegal abstraction and "..shall comply with the then current RP Code of Practice" – ie this assumes that the DNO is providing RP services as per the Code. Any working group reviewing the Code will need to be aware of its mention in UMS and should propose some interpretation of this.

29.As regards the training and qualification of staff, it should be noted that the UKRPA was successful in attracting government funding to develop a level 3 NVQ in RP work. This has

a useful 'standard' against which the performance of RP staff can be judged and to which supporting training sessions may be devised.

HIGH LEVEL PRINCIPLES

30.The UKRPA supports the development of 'high level principles' as suggested in paragraph 8.2 of the paper. However, it has issues with the last two of the draft examples provided, in that

- detailed monitoring would only be unnecessary if the Industry did not set up compliance regimes as suggested in 26 above
- the meaning of the last is unclear. Cost effective to whom? Should safety improvement be subject to cost effectiveness tests?

The UKRPA has produced its own high level principles which are attached as Appendix 1 and these are offered for consideration. They summarise the main points of this response.

SPECIFIC QUESTIONS

31. Section 7 of the paper asks some specific questions. For the sake of completeness, the UKRPA view is as follows [Numbers in bold refer to paragraphs in this response]

7.5	The incentives are not correct and should be amended [**16**]
7.18	To require a DNO to provide RP services would mean a change to the current Distribution LCs. In any case the supplier would still be responsible for discharging his LCs [**12 and 13**]. No change to the present obligations would preclude a supplier being obliged to take RP services offered by an incumbent DNO [**25**]. In this case a DNO should not be obliged to offer such services but he should be able to do so if he wishes[**18**]. There should be no geographic area where, or customer for which, RP is not being provided [**13**]
7.36	It is accepted that self regulation, as provided by correct commercial incentives, is preferable to more external regulation and/or changes for legislation [**16**]. However the option for enforcement needs to be in the background and needs to be viable within clearly understood LCs and measurable yardsticks [**13**]

32. Paragraph 2.30 of the paper identifies options for four areas where improvements could potentially be made. The UKRPA supports action in all of these areas as indicated in the relevant sections of this response.

FINAL COMMENTS

33. There has been little reference to the gas industry in this response. The UKRPA is aware of Ofgem's wish to see more alignment of practices generally in the gas and electricity industries. With Revenue Protection there are some obvious synergies between the two at the practical level and, indeed, some electricity RP providers have for some time been active in gas theft, although differences in market mechanisms appear to impact differently as regards incentives and there are also differences relating to safety aspects. However, within these constraints the UKRPA would support alignment of practices so far as is possible. It should be noted that the NVQ previously referred to was written to be applicable to theft investigations in the electricity, gas and water industries.

34. There has also been no reference to arrangements in the Licence areas of new Independent DNOs. It is thought that, where the obligation of the supplier to contract with an RP service provider is enforced, it may be irrelevant what that IDNO does as regard RP,

particularly if there is no LC to require it. It is understood that arrangements are being discussed for boundary metering at the points of connection to a DNOs network. This would catch all energy supplied to the IDNO area so that, even if theft was occurring in that area and depriving the supplier of income, the DNO would not lose out on DUoS payments based on that metering. However, until such arrangements become clearer, no further comment can be made.

35. At least two working groups have been proposed above to take matters forward and the UKRPA would repeat its wish to take an active part in these. In particular, Ofgem should ensure that participation in any group looking at Settlement arrangements should not exclude non-BSC parties so that all views can be heard.

36 Finally, the UKRPA hopes that this consultation will prove successful in improving arrangements for RP services in the UK and, once again, welcomes the opportunity to comment.

Appendix 1

UKRPA HIGH LEVEL BASIC PRINCIPLES

Ref	*Basic point*	*Comment*
1	Revenue Protection (RP) is a vital activity which must be carried out and should be proactively supported by Ofgem and energywatch.	Justifications in various areas for carrying out RP, including financial, social, environmental, etc are indicated in the paper. Paragraph 2.27 is especially relevant [Ofgem believes that it is appropriate to restate what is expected of the industry, to raise the profile etc].
2	Some suppliers are understood to not currently be properly fulfilling their Licence obligations to detect and prevent theft. This must stop.	Irrespective of obligations in Licence Conditions, theft is a commercial risk which responsible suppliers will want to address for commercial reasons. This is undermined by the perception of some suppliers doing nothing and 'getting away with it'. Obligations need to be clarified and enforced, with real sanctions for non-performance.
3	There is currently an infrastructure in place, including organisations and experienced/qualified staff. If this is perceived to be currently not effective due to problems with commercial incentive on suppliers, these should be addressed to make the infrastructure work.	There seem to be perverse commercial disincentives on suppliers to 'own up' to theft under the current BSC arrangements. These disincentives need to be removed, if necessary by changes to the BSC and/or its supporting Codes and Service Agreements, to encourage theft to be efficiently addressed by all parties involved in that each party bears a proper proportion of the cost of theft attributable to it.
4	There should be no geographic area which is not covered by one or more parties providing RP Services.	Ideally, for reasons of efficiency and to take advantage of 'local knowledge', there should be only one RP Service operating within a geographic (DNO Licence) area. However, the Supplier Hub principle allows a supplier to make whatever arrangements he wishes to meet his Licence obligations (albeit where Settlement is concerned through accredited agents). He may therefore use a DNO RP service - where provided - in a particular area or another agent, but he should have to account to Ofgem in respect of suitable arrangements being in place. Note also principles 6 and 7 below
5	RP work should be carried out to common standards by any party offering RP Services.	Two levels- • Services provided and to what performance criteria to reassure parties contracting for services

		• Qualification/training of staff to ensure customers are treated in a professional manner The former might have a basic level (to acceptable standards) and an enhanced level to offer suppliers a choice. Services should be specified in an updated and amended Revenue Protection Code of Practice (RPCOP) to which all involved parties should sign on and which has appropriate status (see below). The latter is covered by an NVQ Standard which details performance requirements.
6	There should be effective regulation/auditing to ensure that parties are fulfilling their respective obligations and complying with required standards.	As regards compliance with Licence Conditions, that must be Ofgem's role. There needs to be some body which would audit compliance with the new RPCOP and have 'teeth' to require non-compliances to be remedied [compare with the RA for the MOCOPA and the TAA for BSC Procedures]. Suggest there should be a specific Working Group under Ofgem to revise the COP and agree suitable authority and governance.
7	A DNO should have the right to carry out RP services on its own behalf should it so wish.	DNOs have the right to protect their revenue from DuoS income and to undertake their own RP investigations if they believe that suppliers are not doing so either fully or at all. However there is a problem in that, acting in their own right, they do not strictly have rights of entry to inspect meters under the Electricity Act, Schedule 6, para 7 (2). Where a DNO is providing a default 'full' RP Service in its area the RPCOP should, as now, mean that it is a de-facto agent of the supplier and authorised as such *in whatever capacity it is acting*. The establishment/existence of proper auditing could give comfort to a DNO so that it would not need to act [compare with MOCOPA]
8	Within a proper agreed structure to meet the above an element of limited "competition in RP Services" is acceptable.	This to be conceded **only** if all the above is in place. Otherwise it could be a recipe for chaos and inefficiency

WHO OWNS 'STOLEN' ELECTRICITY?

Discussion paper by A J Dick (EA) with acknowledgements to K Blakiston (SEEBOARD)

BACKGROUND

There has been discussion about who has rights to "..recover the value of electricity illegally taken" "..which is in the course of being conveyed by an electricity distributor."

In the first place there are questions as to whether electricity can be stolen from the distribution network and as to who owns it. In fact, strictly speaking, electricity cannot be stolen at all as it is not a material substance[1]. The issue is - who loses financially if a customer abstracts electricity? ['abstract' covers bypassing of or interference with a meter so that the true value of the supply taken is not recorded]

The competitive electricity trading arrangements require a customer to have a contract for supply (deemed or otherwise) with a Licensed Supplier, and in the event of abstraction that supplier obviously suffers loss. With proposed separation of PES supply and distribution businesses, the distributor has neither customers nor a Supply Licence but in fact he also has an interest in part of any money recovered from identification of units abstracted

The elements of the value of electricity abstracted comprise

POOL PRICE COST + TUOS (Transmission Use of System) CHARGES + DUOS (Distribution use of System) CHARGES + SUPPLIER'S COSTS + SUPPLIER'S MARGIN

The first is paid by the supplier to the Pool under Initial Settlement. The second and third are paid by the supplier to the Grid Operator and distributor respectively under a Use of System Agreement. The fourth covers areas such as Pool membership expenses and costs of agents to operate meters, read meters and process and aggregate data (plus billing and customer service costs). The fifth is what the supplier makes from his contract after covering all costs.

ANALYSIS

a) Situation where there is a supply contract in place and the customer has a half-hourly (HH) meter.

In the event of under-registration of the meter due to interference or diversion the supplier pays the Pool only for what the meter registers [plus the appropriate losses as determined by the Loss Adjustment Factor (LAF) to compensate for the technical losses on the distribution system from the electricity entry point (Grid Supply Point) to the metering point. This is necessary as all energy is 'normalised' to trade at the 'pool boundary']. The shortfall is picked up by the relevant Grid Supply Group (GSG) metering and appears as the Grid Supply Group Correction Factor (GCF) to Non Half Hourly (NHH) suppliers ie it is 'smeared' across them in proportion to the energy take of their customer base connected to the relevant GSG. The Pool is thus paid under Stage 1 Settlement for all HH metered supplier's customers and under the Initial Settlement by all NHH suppliers at the Grid Supply Group in proportion to each supplier's customer base at that group [note that if the HH supplier is also a NHH supplier at the GSG this includes himself]. This part of monies recovered therefore belongs to all NHH suppliers at the GSG and should be repaid within the Secondary Reconciliation process[2].

The supplier pays the distributor for DUoS only on metered values so the distributor has directly lost revenue due to the failure to register the actual sales. The distributor is not party to the GCF therefore [if the unregistered sales are not detected] the distributor's reported losses (technical and other) are increased. The distributor suffers a further penalty under the Price Control Formula which penalises losses at an additional 3p/kWh. This is approximately four times the rate that the distributor earns from delivering a kWh

Supplier's margin lost belongs to the relevant supplier[3].

b) Situation where there is a supply contract in place and the customer is profiled.

(i) The profile is initially based on a false Estimated Annual Consumption (EAC) ie the interference is long term and the Annualised Advance (AA) of an under-registering meter has been used.

This has the same effect as an under-registering HH meter ie the supplier (this time a NHH supplier) underpays the Pool and all other NHH suppliers pick up the difference through the GCF. The distributor also loses to the same extent as for HH customers.

(ii) The profile is based on a correct EAC ie the interference takes place after a correct reading (AA) has been obtained

This time the supplier initially pays the Pool and the distributor correctly for the period up to the next AA. When the next AA is found to be lower than the EAC (assuming the abstraction is not discovered), the supplier gets credited with energy by the Pool at the next reconciliation and gets credited by the distributor for UoS charges. The GCF gets altered for all reconciled days between one AA and the next ie the EAC is 'overwritten' and all other suppliers attract a higher level of 'smearing'[4]. The distributor loses as before as the distributor is only paid on registered (metered) energy flowing out of the system at the customer's terminals.

c) **Situation where there is not a supply contract in place**

In the case where a supply contract is in place (ie the customer has a supplier) but he has abstracted electricity from a lamp column or by illegal connection to a distribution line or cable, it could be argued that the supplier is deemed to have been 'deprived' and therefore the situation is as in a) or b) (i) above. This might be difficult to enforce in practice.

In the (rare?) case where supply is being abstracted in this way by a customer not registered with any supplier, all suppliers at the GSG will have paid for this since it will contribute to an increase in the GCF. It will be considered as general (unattributed) losses and the distributor will also have lost revenue. There is no one supplier's margin involved - all suppliers have a reduced margin as their costs are higher.

HOW TO RECOVER THE LOSSES?

The Revenue Protection Code of Practice requires the PES to investigate cases reported to it, to calculate the units abstracted and report this to the supplier (who should advise his data collection agent). For a NHH customer, a new AA is then input in the system (provided this can be achieved within the fourteen month reconciliation process) and subsequent reconciliation can deal with it. There is a mechanism for allocating the AA across more than one supplier if the customer has changed supplier during the period of abstraction. The distributor is also advised and bills the supplier for DUoS charges.

Basically, if the abstraction is discovered in time the suppliers and distributors are neutral to the abstraction. The supplier of the customer involved in the abstraction will have paid the correct charges and it is to him to recover the lost revenue from his customer.

This is more problematic for HH customers where (unless there is a format dispute final (DF) run the adjustments will not take place.

Similarly, where the abstraction is over fourteen months old the reconciliation process cannot automatically re-apportion liability.

This makes it the responsibility of the incumbent supplier, or the supplier during any period where abstraction by his customer took place, to compensate other suppliers and the distributor and to then recover the value of such payments from his customer. This could be applied in all cases above except c), where there is no identifiable supplier. In this case there could be a deemed contract, with the host supplier, although this might be thought inequitable if all suppliers are to be considered the same with separation of businesses? Alternatively, if the parties (including particularly the distributor who has lost regulated income) agreed that payment was conditional upon recovery of the monies from the customer, the distributor could pursue this on behalf of itself and all other parties. Not all distributors might wish to pursue this line, although the standard DUoS agreement does have a Clause 6.7 that allows the distributor to recover payment for use of system where the energy taken has not been properly recorded.

[NOTE: Clause 4 of Schedule 4 of the Utilities Act 2000, enacted since the above was written, gives the Distributor the option to recover the value of energy stolen under these circumstances]

It is considered that the Pool should address any problems in its processes which this analysis identifies.

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1 Within the Theft Act 1968 the offences are Section 13 'diversion' (bypassing a meter) or Section 17 'false accounting' (interfering with a meter). The Electricity Act 1989 covers 'damage' and 'interference'.

2 If the theft covered only one day this would be an easy matter to calculate, based on customer base on that day. However, over an extended period, where customer proportions may have changed, it becomes more complicated. ISRA will need to consider some mechanism for doing this. *[Note. the Reconcilliation process will redistribute the sales (and hence the cash) provided that the theft is detected within the fourteen month reconcilliation period AND the data in respect of the HH customer is re-run in the pool as a dispute run over the period in which the theft took place. The data re-run effectively changes the GCF - but the value of the theft must be considered 'Material' before a re-run will be authorised]*

3 Again, over an extended period, the supplier may have changed. However, the actual suppliers for any part periods will be known.

4 The significance of an EAC and an AA is that the Pool settles on a daily basis and reconciliations take place over a fourteen month period with actual meter advance data progressively replacing estimated data over that period. The EAC is used to apportion a supplier's liabilities to the Pool all the while there is not an actual meter reading advance. Once the actual meter reading is available the actual data retrospectively replaces estimated data over the period since the previous meter reading. The system relies upon a firm meter reading being available at least once per year.