

Central Networks

A company of **e-on**

Theft of Gas and Electricity Seminar

Angela Mann
Revenue Protection Manager
Central Networks West

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Revenue Protection in Central Networks West

Central Networks West

- Activity existed from many years in Midlands Electricity
- Dedicated team working for Asset Owner
- Retained when supply business sold to npower
- Retained following the publication of separate Licences for suppliers and distributors in October 2001

Central Networks East

- Activity existed from many years in East Midlands Electricity
- Dedicated team working on behalf of Asset Owner
- Sold when metering business sold to Siemens Energy Service Ltd
- Provided through Use of System Agreement as a contracted service

Illegal abstraction - the scale of the problem

- Illegal abstraction is a component of distribution losses
- Also includes
 - measurement errors
 - settlement errors
 - technical losses
- Distribution losses estimated at 7% of electricity distributed
- Equivalent in GB to 20,000 GWh or £600m
- Illegal abstraction could account for up to 20% of this or £120m

Illegal abstraction - who should care?

- Customers?
 - pay for those that steal
- Suppliers?
 - licence obligations
 - limited commercial incentives
- Distributors?
 - limited licence obligations
 - commercial incentives
 - safety and security of the network
- Ofgem?
 - compliance with licence obligations
- Energywatch?
 - fair deal for all customers - especially the honest customers

Are the current arrangements effective?

- Need for discussion suggests -no
- Suppliers bear the cost if illegal abstraction is identified
 - Offenders not always identified
 - Difficult to recover money
 - Open to energy watch complaints
- Distributors lose if illegal abstraction is not identified
 - Distribution losses do not reduce
 - Use of system income not realised
- RP service providers tenacity may have perpetuated supplier inertia

What do distributors lose?

- For every residential customer who illegally abstracts electricity a distributor's annual allowed revenue falls because:
 - of the unit volume driver, i.e. $0.5(4,000\text{KW h} \times 1.6\text{p}) = \text{£}32$
 - and the losses driver, i.e. $4,000\text{KW h} \times 3.1\text{p} = \text{£}124$
 - Total lost revenue = $\text{£}156$ per customer per annum
- Clear commercial incentive on distributors to promote Revenue Protection due to lost units
- BUT, reliant upon suppliers entering lost units into settlements

Alternative Models

- Work within current framework
- Allow the licence conditions to prevail
- Incentives for suppliers and distributors must equalise the risks
- Central process facilitated by Ofgem
- Voluntary code, where participating companies realise benefits
- Geographical benefits in aligning with distributors
- Funding a challenge, that the industry must agree upon
- Similarities between gas and electricity should be utilised effectively

International Comparisons of Electricity Theft Levels

- Jamaica – 19%
(The Caribbean Camera, May 21 2004)
- India – 8%
(Chairman of Maharashtra State Electricity Board)
- USA – \$4 billion
(Edison Electric Institute)
- Brazil – T&D losses 20% , estimated non technical half of this
(URPA Presentation July 2003)
- Israel – 1% = \$20-30m per annum
(URPA Presentation July 2003)