EIP124: Non-Technical Losses Identification

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The Problem
EIP124: Background

Non-Technical (Commercial Losses);
• Are not related to the delivery of electricity through normal system operations
• Cannot be fixed by upgrading equipment or altering network design
• Are caused by unmetered supplies, theft and measurement inaccuracies
• Reduce DNO’s ability to plan networks accurately.
EIP124: Background

Unmetered Supplies

- Street lighting, road signs etc.
- Auxiliary loads for reliability of the network and substation heating, lighting etc.
EIP124: Background

Theft

- Unregistered Connection
- Meter tampering
- Illegal activities (Cannabis Farms)
EIP124: New opportunities

Data

- Increasing distribution substation monitoring
- Smart meter data can be made available
- Combining datasets to identify unmetered supplies
02

Expectations
EIP124: Solution Expectations

- Solutions would be replicable across the UK
- The solutions must also be low cost to operate to ensure that there are net benefits to customers
EIP124: Solution Expectations

- A theft risk indicator would provide areas for further investigation by suppliers
- A theft risk indicator would require a confidence factor to determine the appropriate cut-off for taking action
- Assume suppliers are best placed to analyse individual properties
- How can DNOs best collaborate with suppliers
EIP124: Key Stakeholders

Theft risk indicator

- Electricity Suppliers who operate the revenue protection teams
- The UK Revenue Protection Association (the trade body for revenue protection organisations)
- Local police forces

Unmetered supplies estimator

- Local authorities
- Telecommunications companies
- Water companies
- Gas companies
- Charge point operators
## Contacts

<table>
<thead>
<tr>
<th>New Connections</th>
<th><a href="mailto:NGED.connectionspolicy@nationalgrid.co.uk">NGED.connectionspolicy@nationalgrid.co.uk</a></th>
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<tbody>
<tr>
<td>Innovation Team</td>
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<tr>
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<td><a href="mailto:spinkertonclark@nationalgrid.co.uk">spinkertonclark@nationalgrid.co.uk</a></td>
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national grid