



Electricity
Distribution

EIP124: Non-Technical Losses Identification

Steve Pinkerton-Clark – NGED Innovation Engineer
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nationalgrid



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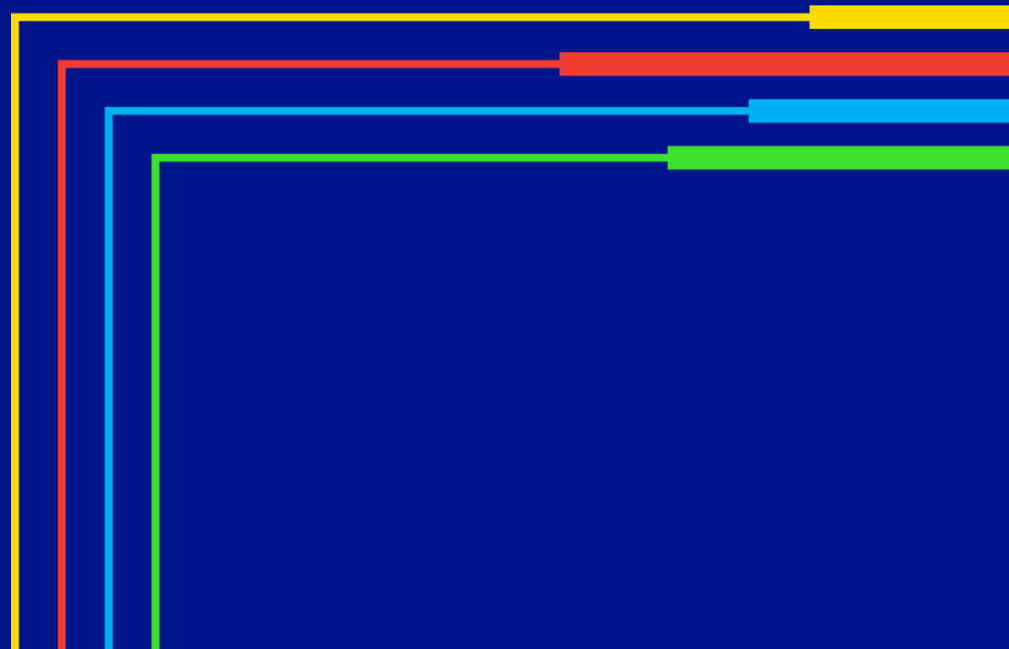
01 Problem & Background

02 Expectations

03 Contacts

01

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.



Unmetered
Supplies



Theft



Inaccurate data

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

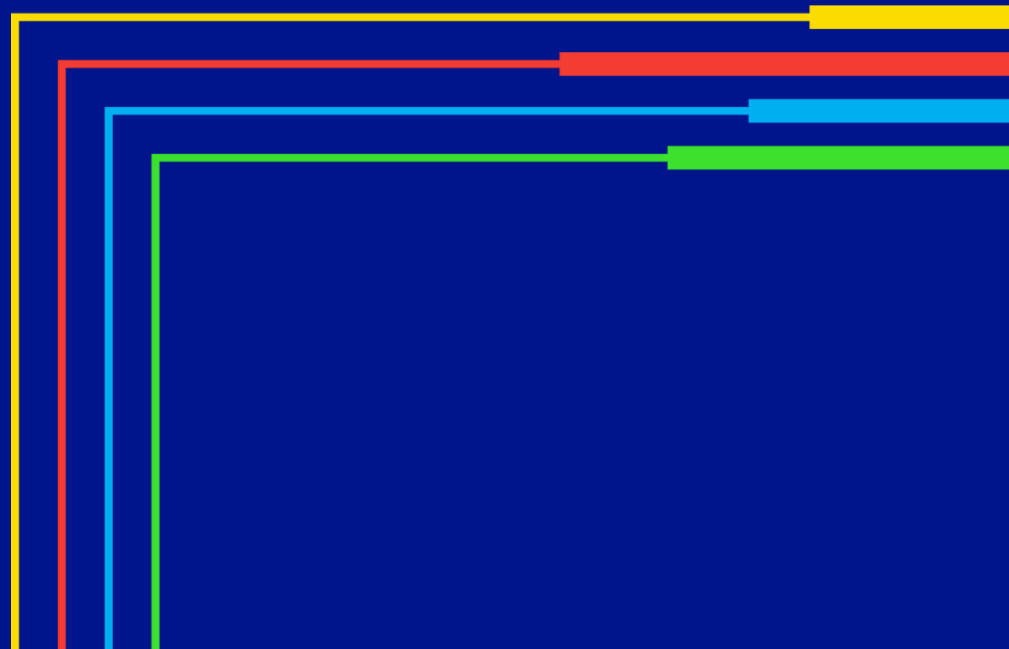
Data

- 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

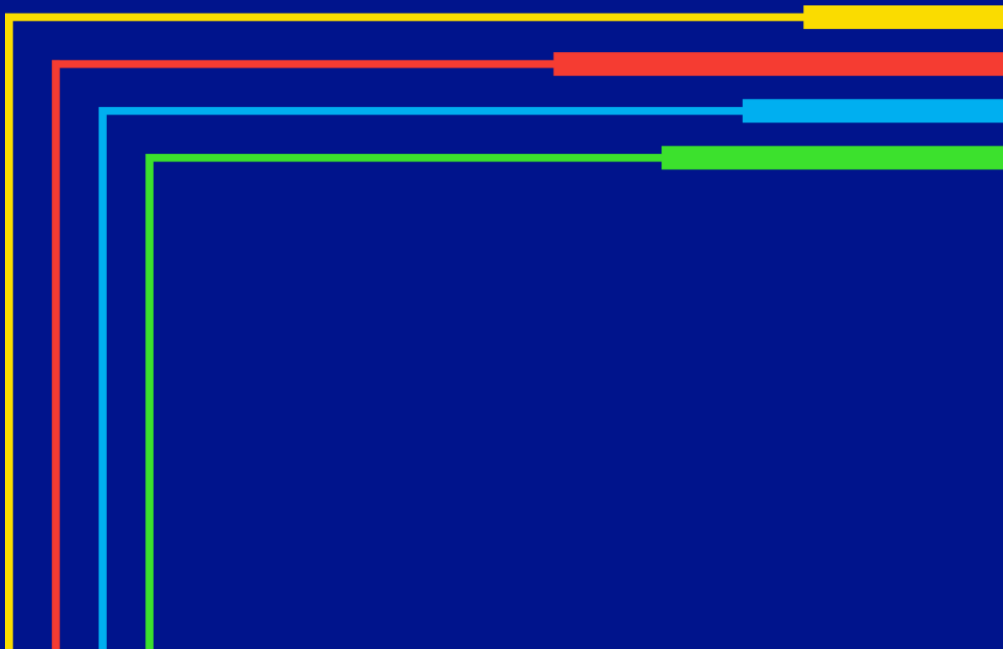
- Electricity Suppliers who operate the revenue protection teams
- The UK Revenue Protection Association (the trade body for revenue protection organisations)
- Local police forces

Unmetered supplies estimator

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

03

Contacts



Contacts

New Connections

NGED.connections@nationalgrid.co.uk

Innovation Team

Steve Pinkerton-Clark

spinkertonclark@nationalgrid.co.uk

national**grid**