

Managing Electricity Transmission Network Reliability

Workshop
21 May 2019

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Reliability

Day-to-day challenges of running a network, within 'normal' operating conditions

Resilience

'the ability to withstand and reduce the magnitude and/or duration of disruptive events, which includes the capability to anticipate, absorb, adapt to, and/or rapidly recover from such events' (FERC, 2018)

Agenda

Introduction

What is Reliability?

Refreshment Break

Booths - Part 1 - 3 out of 5

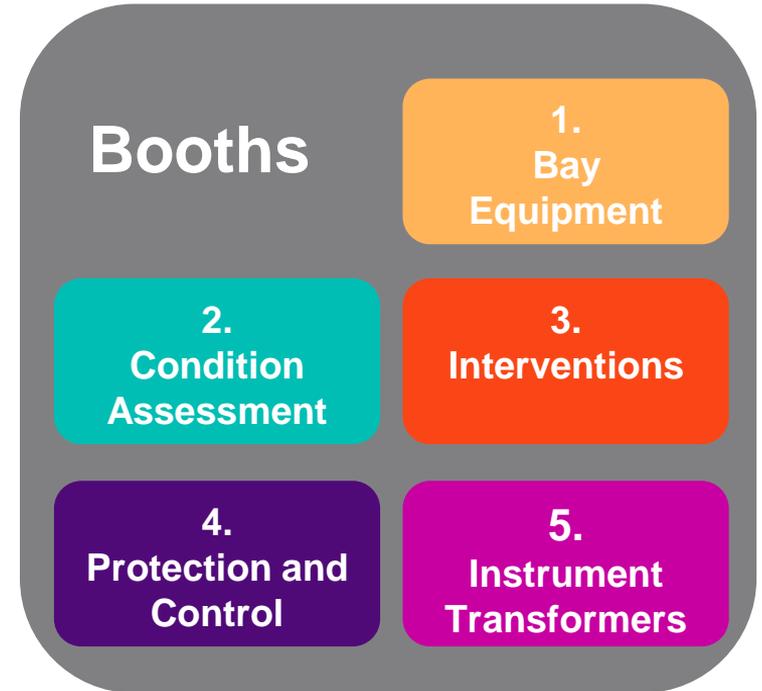
Lunch

Booths - Part 2 - 2 out of 5

Your feedback

Refreshment Break

Wrap up and close



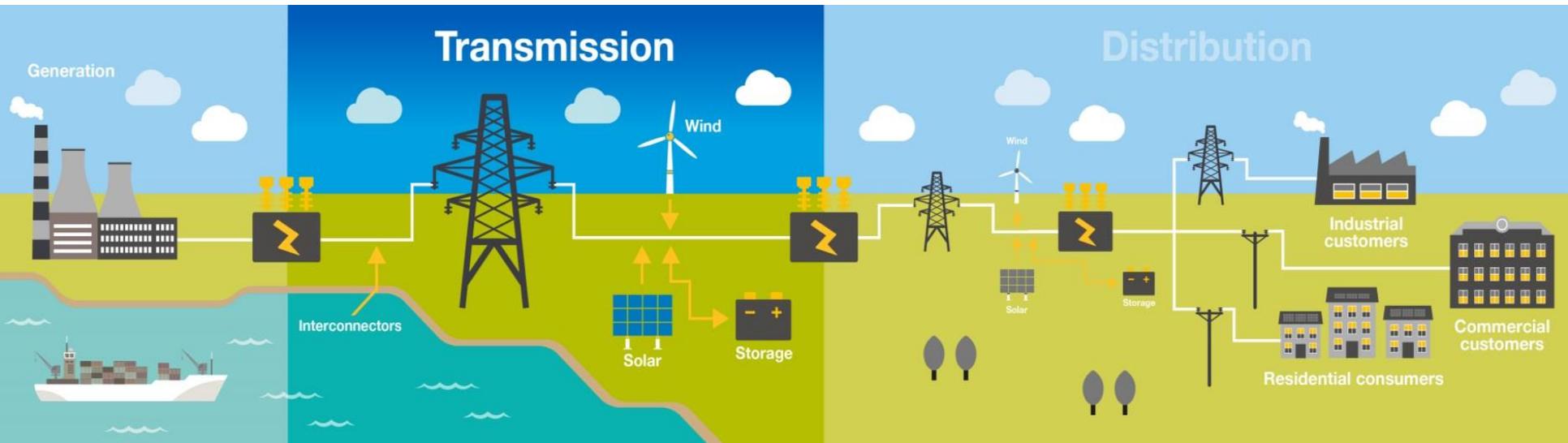
Today's approach

The principle is that we talk for a bit, then you talk for a lot (and we listen)

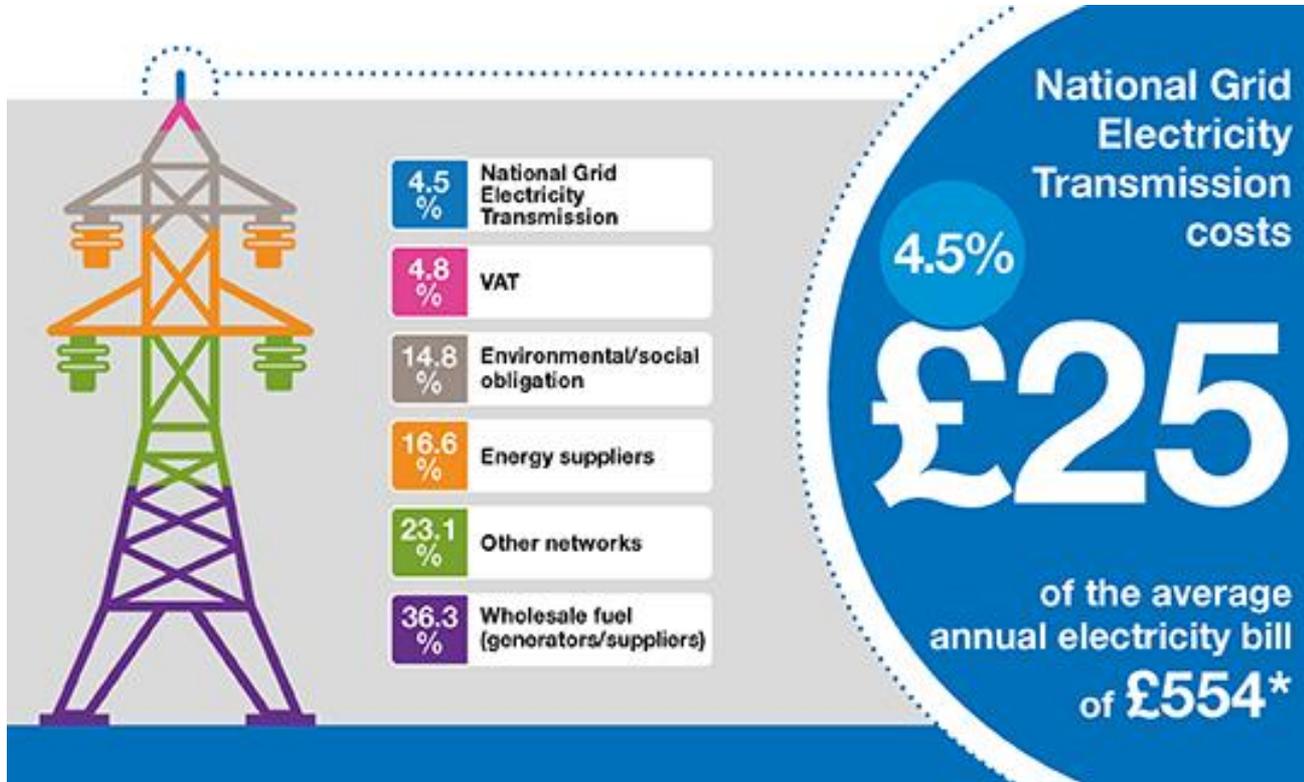
If we talk about bill impact, it's based on RIIO-T1 parameters

We won't assume we know everything you're interested in (car park)

Please leave your feedback at the end



Household bill impact: electricity



**How we're
building our
business plans
with you**

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Listen



Co-Create

Propose

Listen

Co-Create

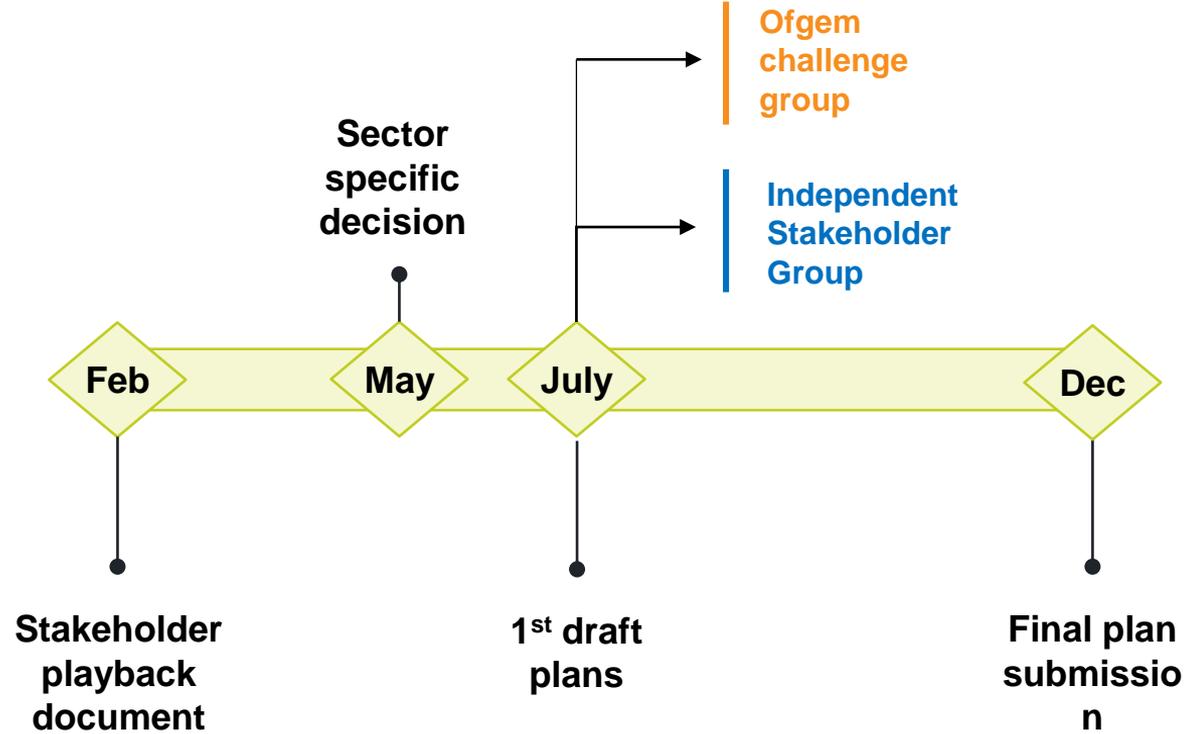


Propose

Listen

Co-Create

Propose



What is Reliability?

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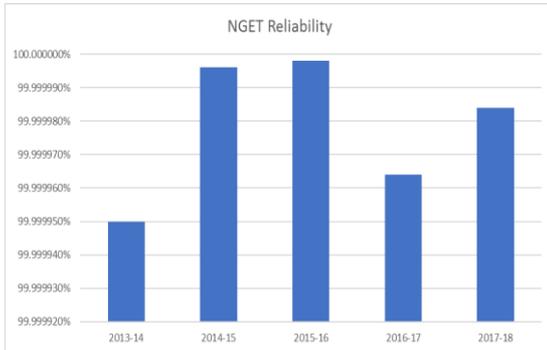
99.999984% reliable

Reliability(%)	MWh not suppliers	Equivalent houses without supply for 24 hours	Example towns/cities
99.99999	25	2938	Alcester or Tadcaster
99.99998	50	5877	Beaconsfield or Milford Haven
99.99995	125	14692	Billericay or Wilmslow
99.9999	250	29384	Harrogate or Rugby
99.9995	1248	146920	Bradford or Coventry
99.999	2496	293840	Bristol or Leeds

Measuring reliability

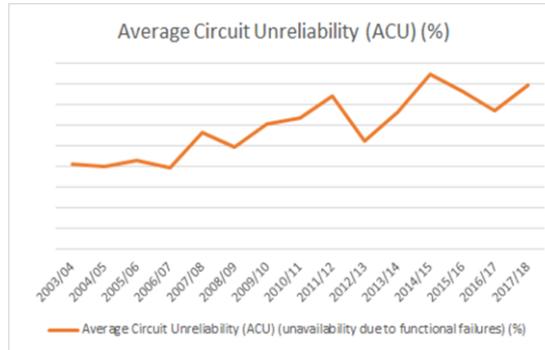
Energy Not Supplied

- Incentivised to reduce loss of supply events



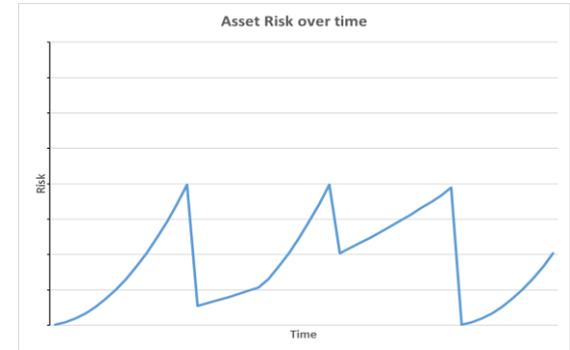
Average Circuit Unreliability

- Measures proportion of network switched out due to faults or defects

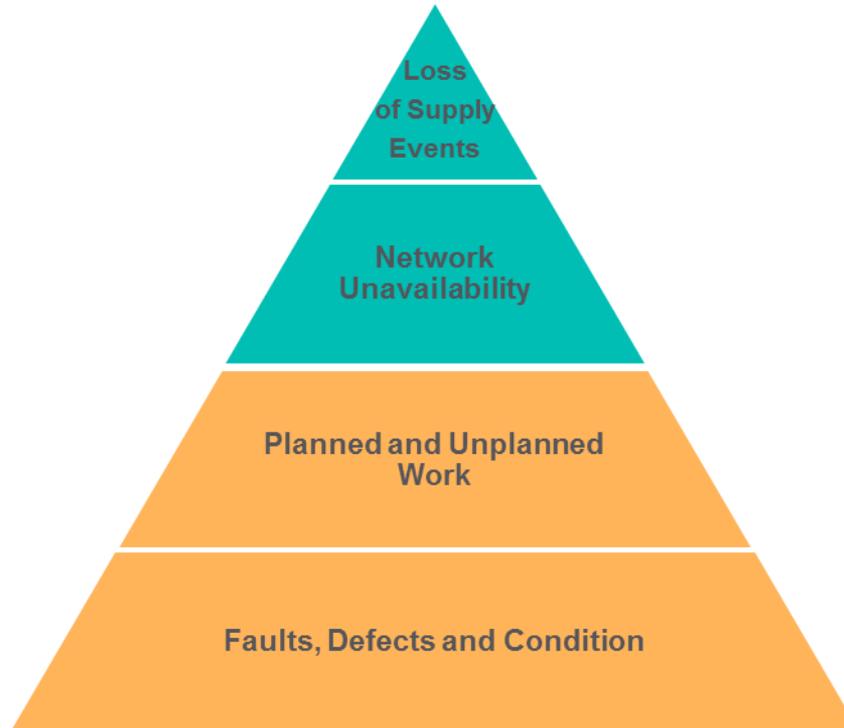


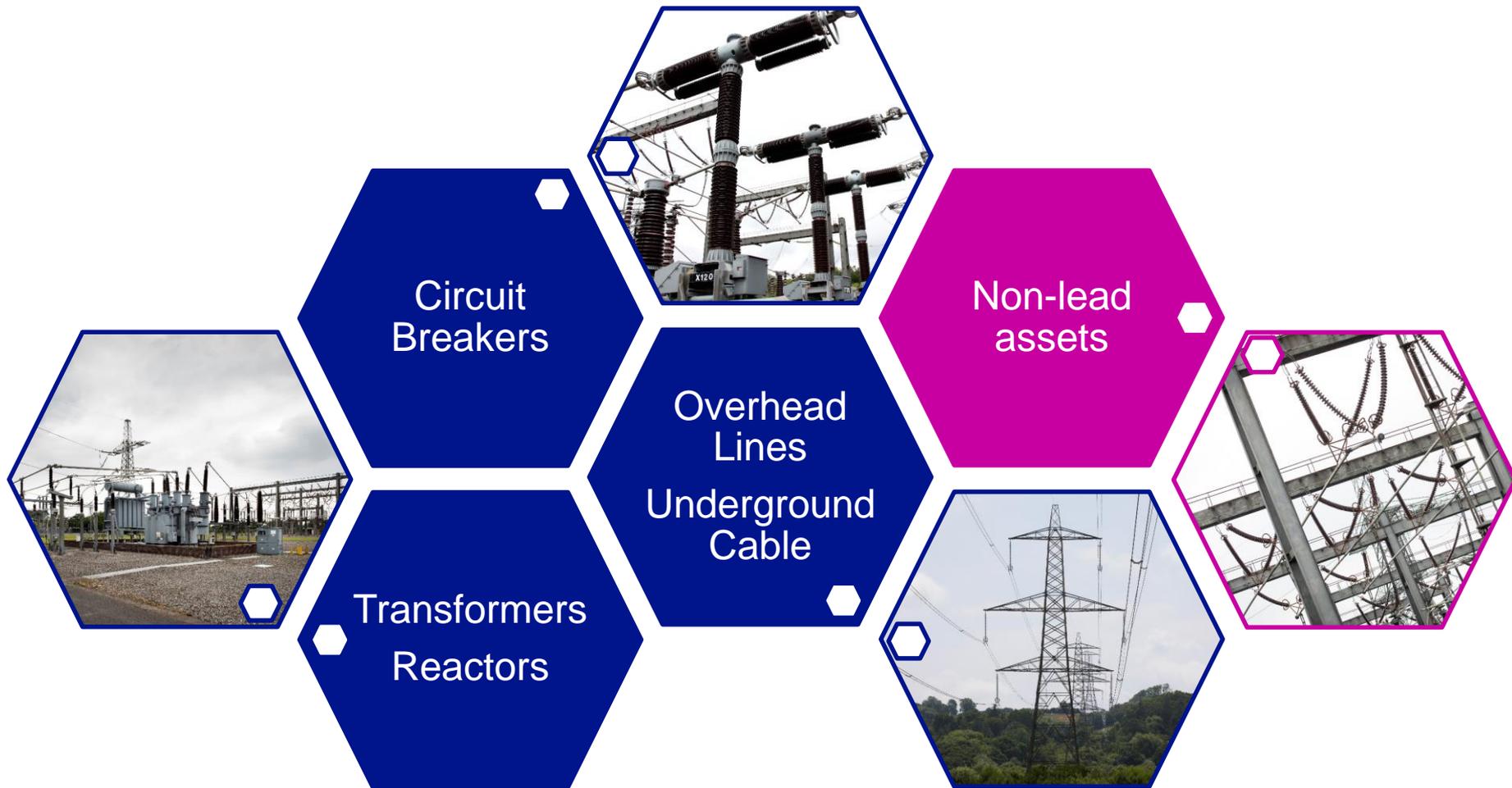
Network Risk

- Considers asset probability of failure and consequence

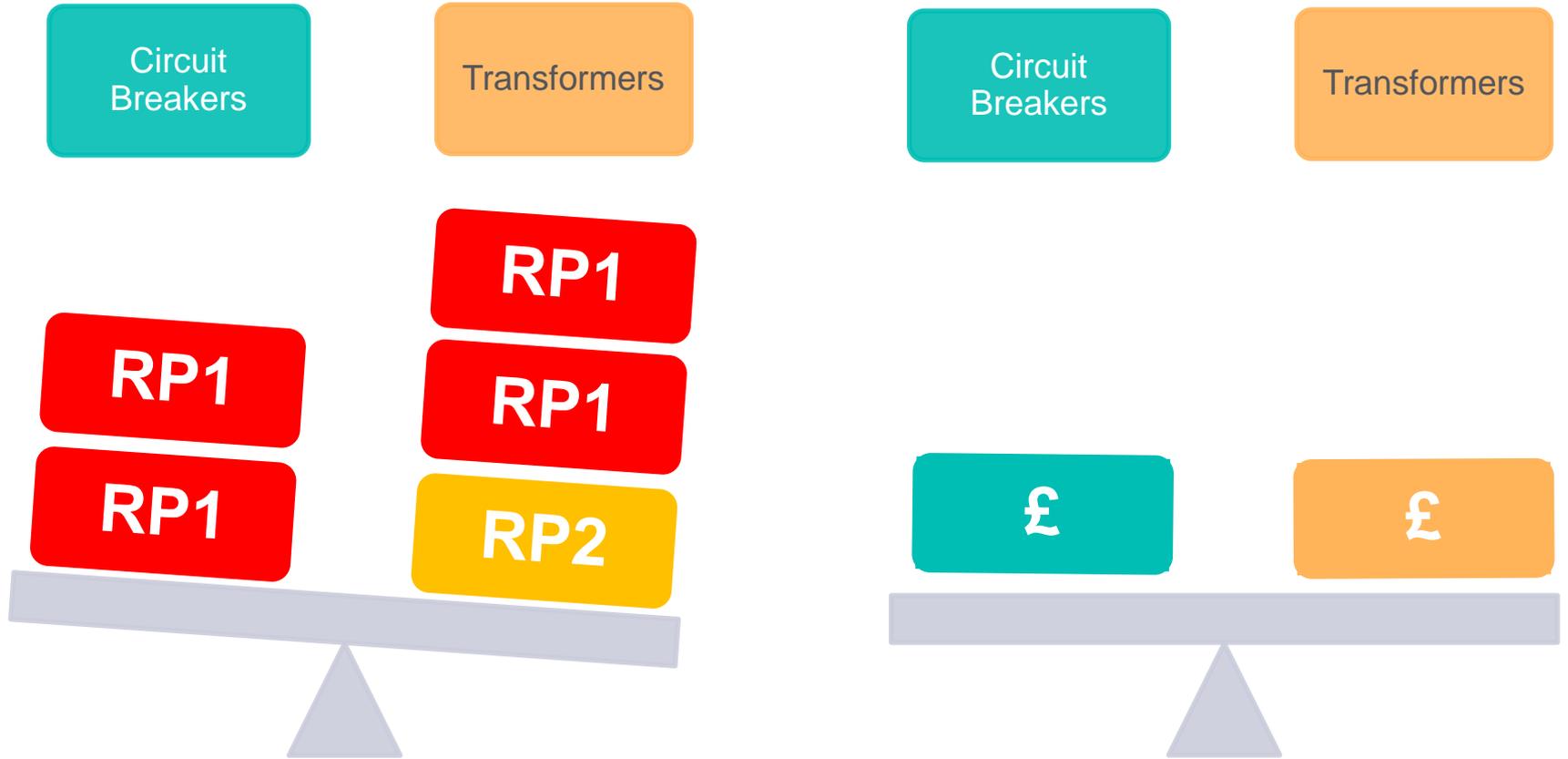


Keep reliability the same

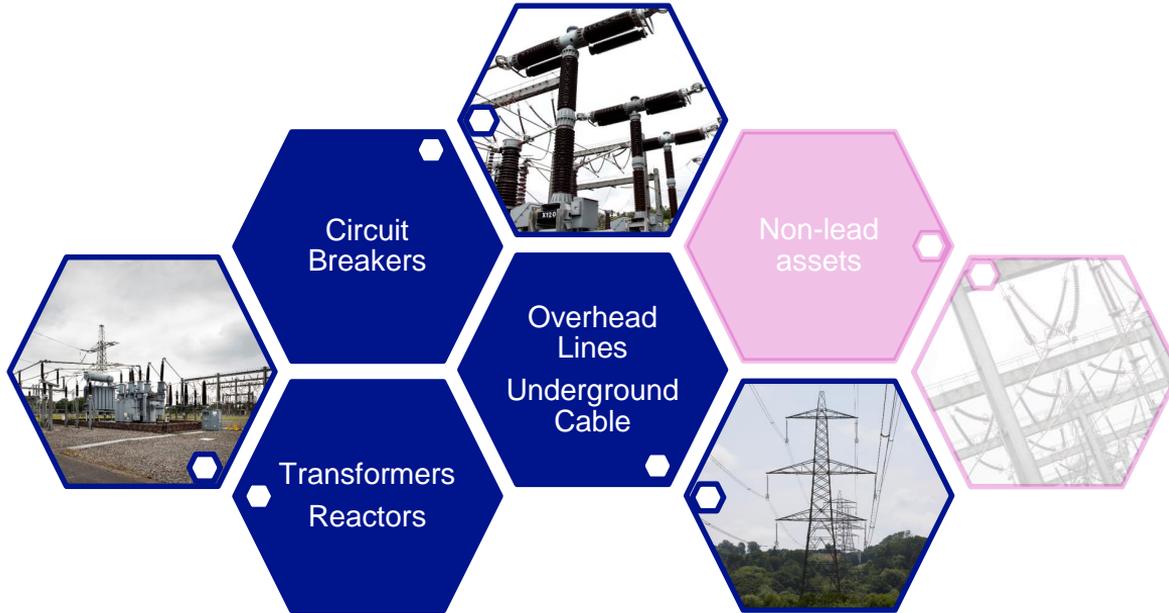




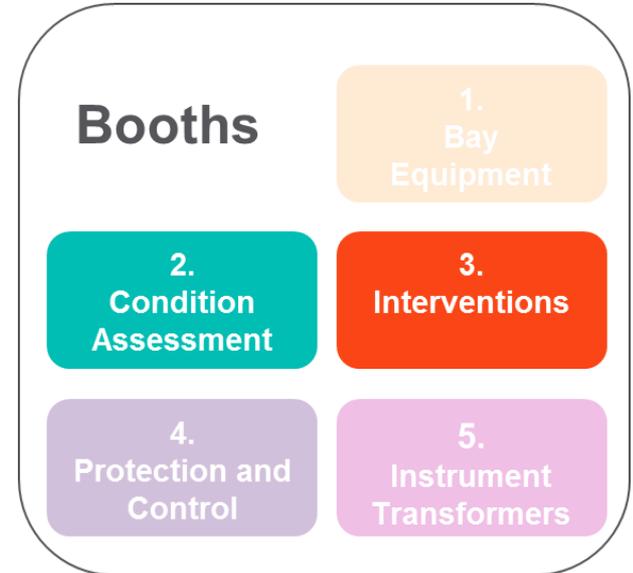
NARMs



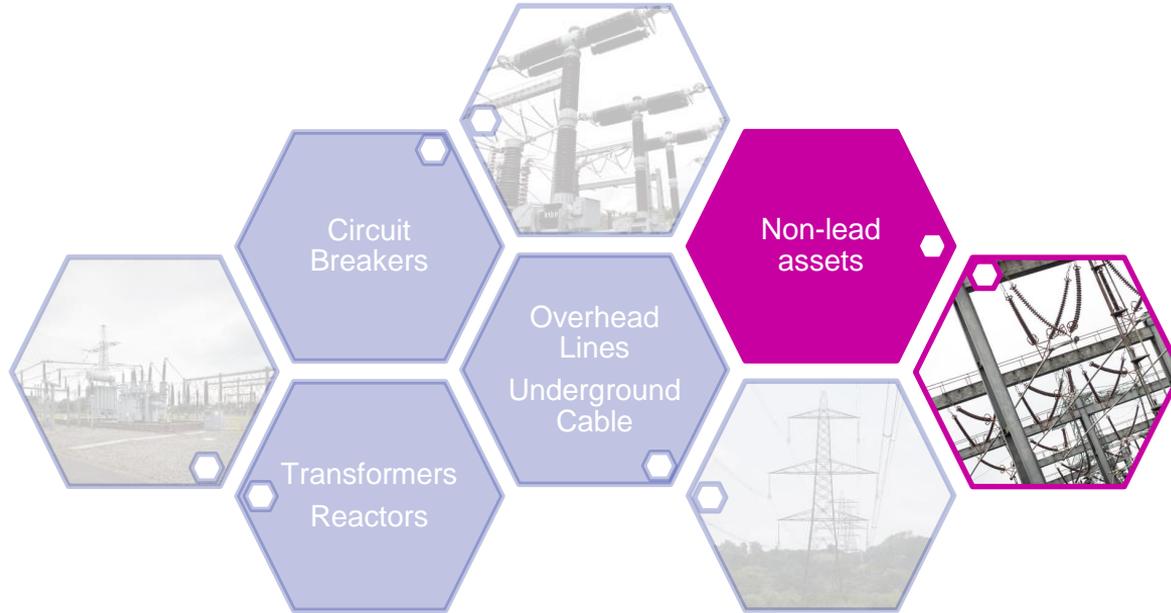
Lead assets in RIIO-T2



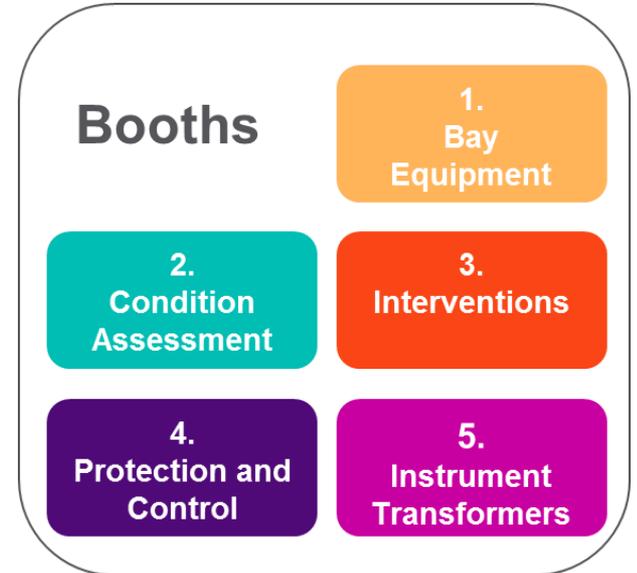
Propose to hold end of RIIO-T1 risk position



Non-lead assets in RIIO-T2



Asset specific policies



Next steps



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