

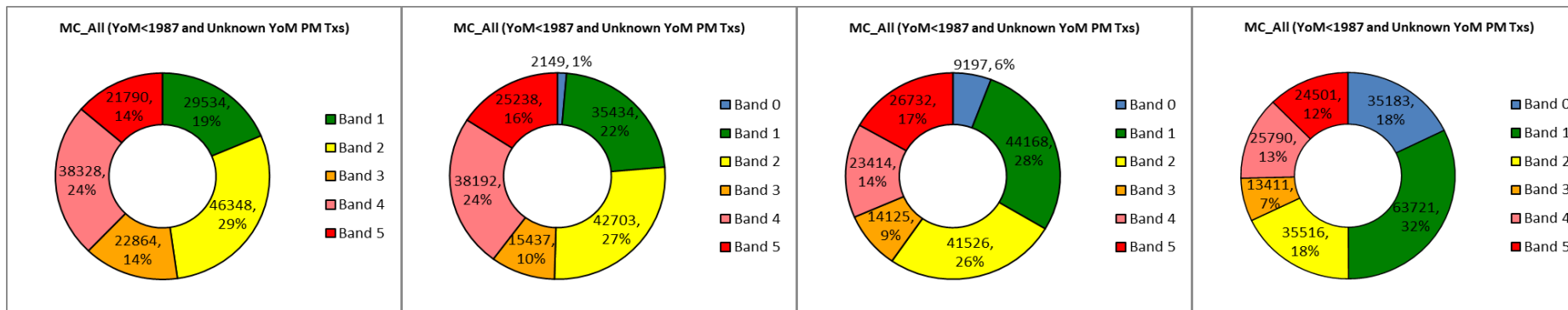
Can we detect PCBs in PMTs in situ?

EIP011

28 February 2023

Background

- UK PCB Regulations 2019 require all items possibly containing PCB >50ppm to be tested or removed by 31st December 2025
- This required UK DNOs to replace or PCB test any pre-1987 oil-filled assets inc >200,000 assets
- While GMTs are tested using existing equipment, PMT testing is problematic due to accessing and de-energising issues
- ENA PCB Working Group identifies ~88k transformers across all DNOs to be tested/replaced before 2025 (majority is PMTs)



Enablers and Constraints

- **NIA WPD PCB Sniffer** concluded:
 - no safe method of extracting oil from overhead assets whilst operational
 - not all PCB congeners are present within headspace asset without heating
- **NIA SPEN On-Site Non-Intrusive PCB Tester:**
 - intended to detect PCB through naturally existing gamma rays from Cl-36; changed to a deuterium-tritium neutron generator.
 - Closed due to health and safety risks.

Constraints:

- Strict deadline to remove PCB from the network by the end of 2025
- Ability to 'live' test
- Some swab test options exist in the US but is not suitable in the UK context as samples don't reach US for testing within the required timeframes

Involvement and Implementation

- Key stakeholders: UK & International DNOs, ETs, EA, Network Rail, private network owners, environmental contamination specialists
- Scale of the problem: ~88k PMTs across all UK DNOs plus overseas networks
- Implementation deadline: December 31st, 2025.



Energy Innovation Basecamp

28 February 2023
ICC Birmingham

#Basecamp28

Participant joining code
[Slido.com](https://www.slido.com)

Can we detect PCBs in PMTs in situ?

