

Common Network Asset Indices Methodology

Ensuring a common approach to the evaluation of asset health and criticality

EA Technology are proud to be working with all UK DNO's to implement the Common Network Asset Indices Methodology (CNAIM) Systems into their organisations

For RIIO-ED1, Ofgem has introduced regulatory reporting requirements for Great Britain's Distribution Network Operators (DNOs) to report information relating to both asset health and criticality. This information is known as the Network Asset Indices and these provide an indication of the risk of condition based failure of network assets.

The requirement for reporting of Network Asset Indices is outlined in Standard Licence Condition 51. This licence condition also requires DNOs to jointly develop a Common Network Asset Indices Methodology, such that DNOs adopt a common approach to the evaluation of asset health and criticality.

The Network Asset Secondary Deliverables relate to the improvement in risk that is delivered by Asset Replacement, as well as some Refurbishment activities.

The list of assets covered by the common methodology are listed in the table below. Each DNO is only required to report Network Asset Indices for Asset Categories where they have agreed Secondary Deliverables. Consequently, DNOs shall only need to implement the Common Network Asset Indices Methodology for those Asset Categories where they are required to report Network Asset Indices.

EA Technology have been asked to provide support for the development of the methodology and delivery and implementation of the common models to all GB DNO's.

For full details of the methodology, please refer to the DNO Common Asset Indices Methodology Document as submitted to Ofgem on the 1st July 2015.



HI Asset Category's covered by the Common methodology listed alongside the factors and modifiers.

HI Asset Categories	Factors and Modifiers
1. LV OHL Support	Location Factor
2. LV UGB	Location Factor Sub Cables
3. LV Circuit Breaker	Duty Factor
4. LV Board (GM)	Expected Life
5. LV Pillars	Ageing Rate
6. HV Switchgear (GM) - Primary	Initial Health Score
7. HV Switchgear (GM) - Distribution	Ageing Reduction Factor
8. EHV Switchgear (GM)	Reliability
9. 132kV Switchgear (GM)	Health Score Modifier
10. HV Transformers (GM)	Reliability Modifier
11. EHV Transformers (GM)	Observed Condition Factors
12. 132kV Transformers (GM)	Measured Condition Factors
13. EHV Cable (Non Pressurised)	POF
14. EHV Cable (Oil)	Combination (e.g tx, tc)
15. EHV Cable (Gas)	Reporting HI
16. 132kV (Non Pressurised)	Reporting HI Future
17. Submarine Cable	Reporting HI Intervention
18. LV Poles	Financial Consequences
19. HV Poles	Safety Consequences
20. EHV Poles	Environmental Consequences
21. EHV Towers	Network Consequences EHV and 132kV
22. 132kV Towers	Network Consequences LV and HV
23. EHV Fittings	Oil Test Modifier
24. EHV Tower Line Conductor	DGA Test Modifier
25. 132kV Tower Line Conductor	FFA Test Modifier
	Cost of Failure Financial
	Cost of Failure Safety
	Cost of Failure Environment
	Cost of Failure Network
	Financial Factors
	Safety Factors
	Environmental Factors
	Network Factors
	Criticality Index
	Contingency Modules

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