## **Reliability Workshop Secondary Delivery Indicators**

National Grid Scottish Hydro-Electric Transmission Limited SP Transmission Limited





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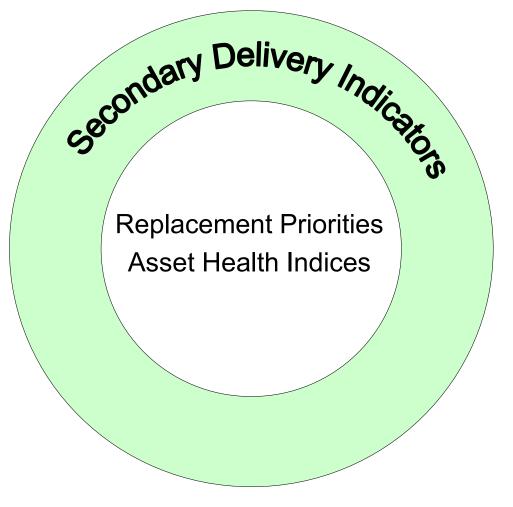
### Output metrics already reported in Transmission Regulatory Reporting

- Equivalent of DNO Health Index charts including forecast and associated uncertainty reported as Asset Health Indices in Table 4.28 with commentary in narrative
- In addition, Transmission licensees also report
  - The constituent elements of Criticality (safety, environmental and reliability) in Table 4.29
  - Replacement Priorities (combination of asset health index and criticality) including forecast and associated uncertainty in Table 4.28 with commentary in narrative
- Asset failure data is reported in Table 4.6 with commentary in narrative
- Circuit unavailability data and associated uncertainty is reported in Table 4.3 with commentary in narrative
- Asset fault data is reported in Table 4.5 with commentary in narrative



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#### Network Output Measures as Secondary Delivery Indicators



**Desirable principles** 

- Based on network risk profile
- Demonstrates improvements in asset management capability
- Highlights changes in network risk
- Flexible to recognise need to deliver overall capital plan in an efficient manner

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# **Secondary Delivery Indicators**

Issues which should be addressed:

- Development of reliability report
  - Need to achieve balance between ex ante rulebook and qualitative assessment ex post
- Issues for consideration
  - Asset Condition does not deteriorate homogeneously so position is not fixed
  - Uncertainty increases over time i.e. it will be significant over an 8 year period.
  - Interaction between non-load and load related requirements

Enerav

Scottish and Southern



## **Network Output Measures – Transmission Vs Distribution**

#### Non-Load Related Outputs

Area	Transmission	Distribution
Reported Areas	Asset Health Indices Network Risk Indices (Replacement Priority) Criticality Performance (inc failures)	Asset Health Indices Fault rates
Consistency	Jointly developed approach across the Transmission Licensees, sharing information and agreeing common definitions and factors	Category definitions, tables and format developed by Ofgem and DNOs
Treatment of criticality	Asset Health Indices contain no elements of criticality Condition combined with criticality is used to define Replacement Priorities	Criticality implicitly included in asset health indices
Consequences Considered	Safety and Environmental consideration within criticality	Safety and Environment implicitly included in asset health indices
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