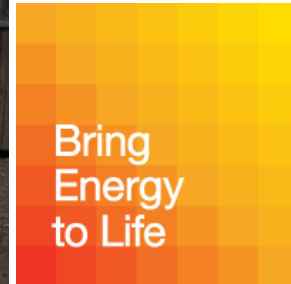
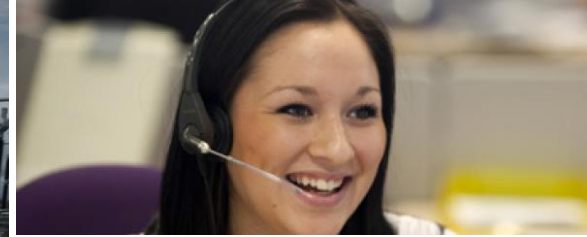


New STCP for Network Output Measures (NOMs)



Rob Wilson & Simon Orr
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Overview

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What are Network Output Measures (NOMs)?

2

The case for a new STCP

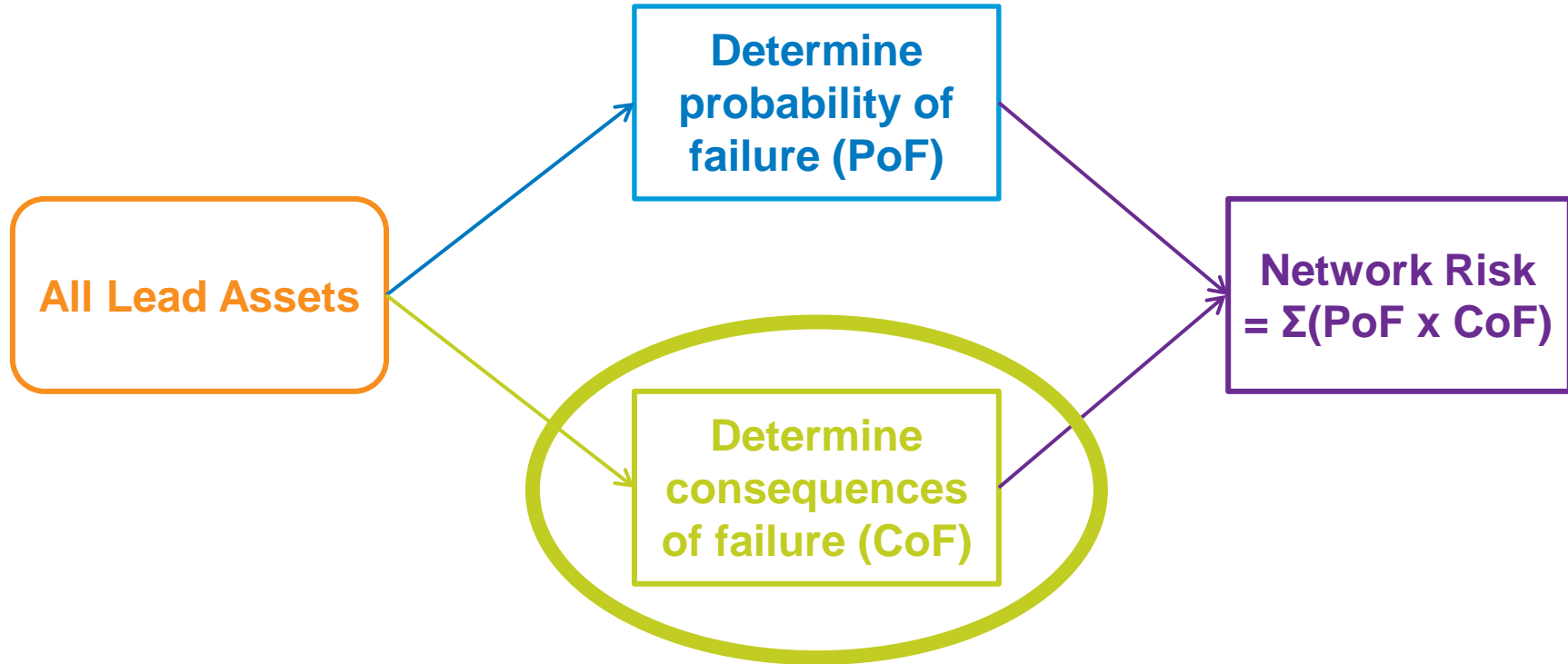
What are Network Output Measures (NOMs)?



Network Output Measures (NOMs)

- A set of secondary outputs in the RIIO framework that track the three onshore TOs' asset management performance
- Includes the Network Replacement Outputs measure which governs asset replacement revenue for the onshore TOs
- Ofgem have issued a formal instruction to NGET, SSE and SP to finalise and implement a revised methodology for NOMs by end of April 2018.
- Part of the methodology is the calculation of monetised Network Risk


Monetised Network Risk



Consequences of Asset Failure

Financial

- Cost of replacement
- Cost of clean up



Safety

- Harm to staff
- Harm to public




Environment

- Damage to environment



System

- Economic loss of load (consumers)
- Costs to System Operator



System Consequence

Disconnection of Customers

- Value of Lost Load (VOLL), including vital infrastructure
- Generation disconnection payments
- System Operator rebalancing costs

Boundary Transfers

- System Operator boundary constraint costs
- Based on same modelling as Network Options Assessment (NOA)

Reactive Compensation

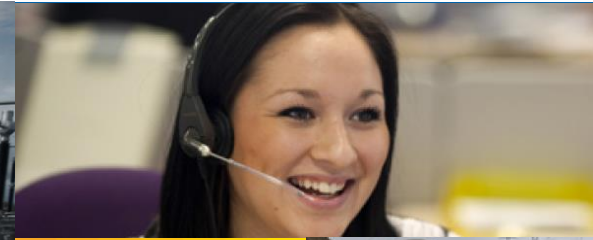
- System Operator replacement voltage control costs

Costs Required from the SO

Data	Source
Annual average system buy price	Historic market data*
Annual average system marginal price	Historic market data*
Vital Infrastructure sites	Various lists and external sources*
Boundary constraint costs	Output of bespoke power system economic model runs
Reactive compensation requirement factors	Operational history and engineering judgement
Cost of procuring MVAR from generation	Operational history

*Potential for non-SO data source to be agreed

Why change the STC(Ps)?



Why change the STC(Ps)?

- NGET is bound by our license to create, maintain and comply with the NOMs methodology
- In order to comply with the new methodology under development NGET TO, SHETL and SPT will require potentially sensitive cost data from the SO
- The TOs will not agree to be license bound in the future to the new methodology without the SO being obliged to provide the data to the TOs with agreed data collection methods and timescales.
- The three companies have submitted an implementation plan to Ofgem which includes STC modifications complete by April 2018.

A New STCP?

- The NOMs methodology requires a bi-lateral annual exchange of data between SO and TOs with multiple steps and sensitive timescales
- It involves the use of the economic modelling very similar to that used in the Network Options Assessment (NOA)
- It is therefore proposed that a new STCP is created using 'STCP21-1 Network Options Assessment' as a template
- It is also proposed that the content of the STCP should be agreed between TOs and SO within a STC workgroup to ensure appropriate engagement from the SO

Summary and Proposal

- NGET, SHETL and SPT are license bound to keep the NOMs methodology under review. They have also been instructed by Ofgem to complete a revised version of the Methodology by April 2018.

Proposed course of action:

- Oct 2017: Submission to Panel of STCP modification proposal to form working group to write new STCP.
- Nov 2017: Workgroup formed to comprise of existing TO representation on NOMs methodology workgroup and appropriate SO representation
- April 2018: New STCP is submitted to and approved by Panel
- TBD: Implementation date of new STCP