YAhOO Year Ahead Outage Optimiser

Energy Innovation Summit 2025





The Problem

- In the rapidly evolving energy landscape, ensuring a reliable power supply is crucial
- The generation mix adds layers of complexity to outage planning, creating additional manual work
- Without process change, massive integration of renewable energy sources will exacerbate this manual workload
- **Currently** the process for creating and updating the Year Ahead Outage Plan is a manual, time- and effort-exhaustive process, with little opportunity to explore more creative solutions that could be optimal for network, Developer and Consumers/ Community.

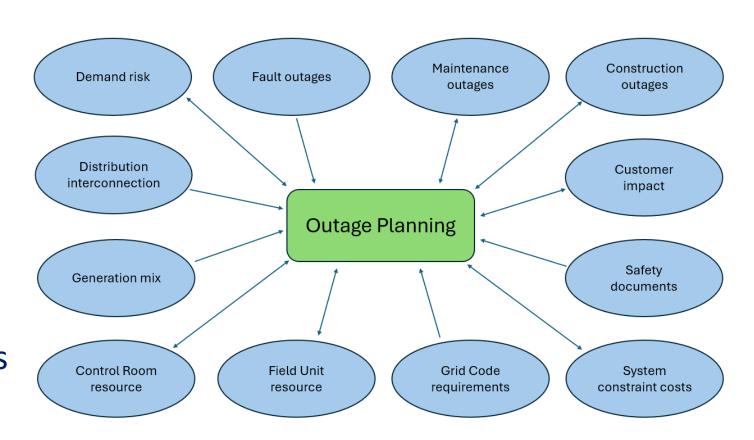




YAhOO - Year Ahead Outage Optimiser

An easy-to-use, flexible decision support system that:

- Consists of three complementary algorithmic building blocks
- Automatically detects constraint violations and conflicts
- Provides flexibility for different operational scenarios
- Helps manage the complexity of changes and additions in the outage plan
- Provides recommendations to outage planners



YAhOO reduces response times for Outage Planners to process outage changes - a key enabler for focussing on higher value activities



Partnership

Agile and Innovative

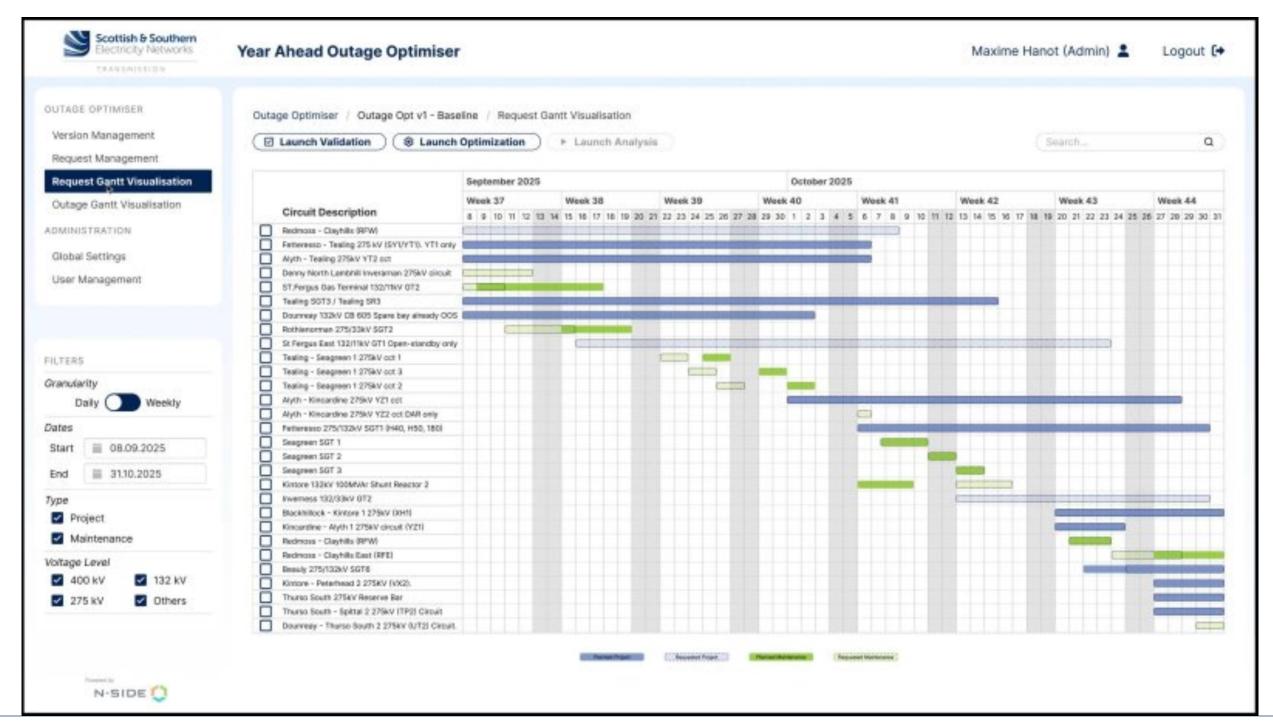


Energy Networks





The YAhOO Tool

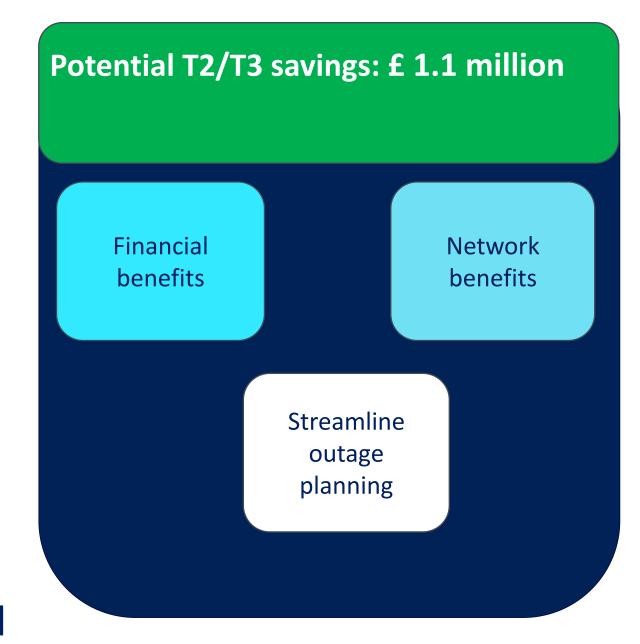




TRANSMISSION

Benefits

- Maximise volume of work delivered
- Maximise plan stability
- Maximise network availability
 - Minimise system constraint costs for NESO
 - Minimise demand risk
- Minimise disruption to connected customers
- Outage Planners have a faster route to their scheduling options which will help lead to optimal planning decisions





Thanks for listening!

Next Steps

- Project closeout and share learnings through the NIA
- CIGRE submission
- Next phase trial use on 2027 Outage Plan
- Assess suitability for planning in shorter timescales

For further information

- Contact any of the project team (<u>ryan.flett@sse.com</u>, <u>vse@n-side.com</u>)
- Or reach out to transmissioninnovation@sse.com



Thank you for your attention

