

National Grid ESO Stability Pathfinder Support

ITPenergised is a trusted advisor providing technically focused, reliable, commercially minded consulting services for National Grid ESO Stability Pathfinder.

We are specialists in power system studies within the renewable energy and low carbon sectors. We cover a broad range of work, including electrical feasibility studies, design studies, owners engineer review, grid code compliance and energisation support.

Stability Pathfinder is a National Grid ESO (NGESO) project to procure stability support services for the UK transmission system. NGESO's stated ambition for Stability Pathfinder is *'by 2025, we will have transformed the operation of the electricity system such that we can operate it safely and securely at zero carbon.'*

Six Stability Pathfinder tenders are proposed to be launched between now and 2023. Stability Pathfinder 1 launched in 2019 and requested tender submissions for inertia support in the Mersey region. Stability Pathfinder 2 launched in 2020 and requested tender submissions for short circuit and inertia support in Scotland. The latest third party project, NOA High Voltage Pathfinder Pennines, launched in March 2021 and requests reactive power support in the North of England. Three more tenders will be released before 2023.

Our power systems team has a wealth of experience in delivering technical studies for all aspects of NGESO Stability Pathfinder.

We support the technical client meetings regarding technology choice and complete and review the Expression of Interest (EOI) for submission to NGESO.

We can facilitate and lead technical meetings with manufacturers regarding their dynamic equipment and models for inclusion within the feasibility studies.

We build power systems electromagnetic transient (EMT) models and run studies for fault ride through, frequency response, reactive response and voltage stability and prepare feasibility reports in NGESO format for submission.

Our services include:

- Facilitating technical and commercial NGESO launch meetings
- Supporting discussions with equipment manufacturers
- Completing/reviewing expressions of interest
- Reviewing and testing manufacturer 'black box' models for use in feasibility studies
- EMT studies in PSCAD/DigSilent including fault ride through, frequency response, reactive response and voltage stability
- NGESO technical feasibility study reports.

