



Grid Code Development Forum

Quality Assurance Issues: System event investigation findings

June 2024

Models & Simulations: Why are they Important?

It's vital that the model is a true and accurate representation of the plant as built

GB Network model underpins key license activities that the ESO undertake

Network Development

Outage Planning

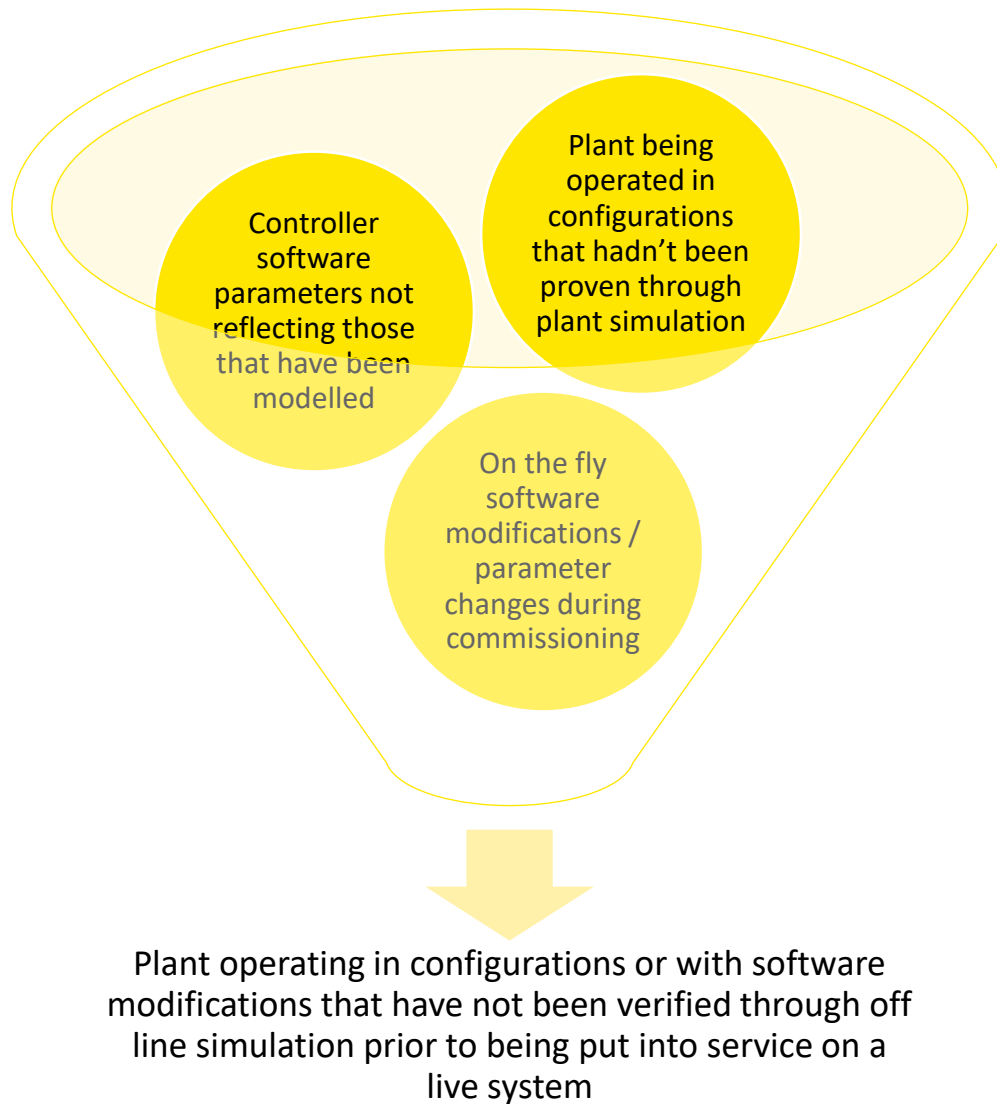
Operability Assessment

Compliance Assessment

Fault Investigations

Models & simulations must be a true and accurate representation of the plant as built

Findings during system event investigations



Plant simulation is a key risk mitigation measure for system operation. It aims to reduce the likelihood of adverse operation and is a means of demonstrating compliant behaviour,

Proposals to give further confidence that suitable quality assurance measures are in place for site commissioning activities:

1. Submit a single line diagram for the plant showing all potential operating configurations and which simulations relate to each configuration, demonstrating that all operating scenarios are covered by an appropriate series of simulations.
2. Provide evidence that the control system installation and commissioning contractor has a suitably accredited quality management system and software change management procedures in place, preferably ISO9001 accredited.
3. Submit a copy of the Factory Acceptance Tests (FAT) and site commission quality plans
4. Submit a copy of the site test procedures and a programme for site commissioning to facilitate ESO attendance during an agreed set of site commissioning activities, where perceived necessary. The scope of witness testing would be agreed prior to ION
5. Provide details of key parameters / controller settings used in the models / transferred to the controller hardware prior to commissioning activities commencing

Alternative suggestions being considered: Customer to employ the services of an Independent Engineer to oversee commissioning activities and confirm that suitable quality measures are being employed.

Q&A