

Postdoctoral Research Topic

By Héctor Chávez Oróstica

Increasing levels of grid variable generation have reduced primary frequency response due to the low contribution of variable generation to both system inertia and governor response.

This reduction in the primary response will, in particular, require a revision of inertia adequacy to comply with ENTSO-E primary frequency control requirements.

This work will determine the wind penetration level that will require an inertia constraint in NORDEL to comply with such requirements through a dynamics simulation of the primary frequency response of NORDEL as levels of variable generation increase.