

RESEARCH QUESTION

Given existing design challenges and increasing penetrations of variable renewable energy resources as energy transition proceeds, how should we design operational practices for balancing electricity markets?

RESEARCH OBJECTIVES

RO1

To determine what features are needed in centrally-coordinated arrangements for procuring frequency control services during energy transition

RO2

To better understand how balancing flexibility capabilities in scheduling timeframes are changing during energy transition, and how these changes might impact the suitability and design of more decentralised operational balancing practices

RO3

To explore how more decentralised operational balancing practices can be configured to maximise the deployability of balancing flexibility in scheduling timeframes

CHAPTERS

Chapter 4

Chapter 5

Chapter 6

Literature review

Data analysis

Techno-economic modelling

RESEARCH METHODS