

Operability Strategy Report 2024

Webinar
23 January 2024

Agenda

Welcome and housekeeping	11:05 – 11:10
Zero carbon 2025 & decarbonisation	11:10 – 11:15
2025	11:15 – 11:30
2035	11:30 – 11:50
Q&A	11:50 – 12:20
What's next	12:20 – 12:30

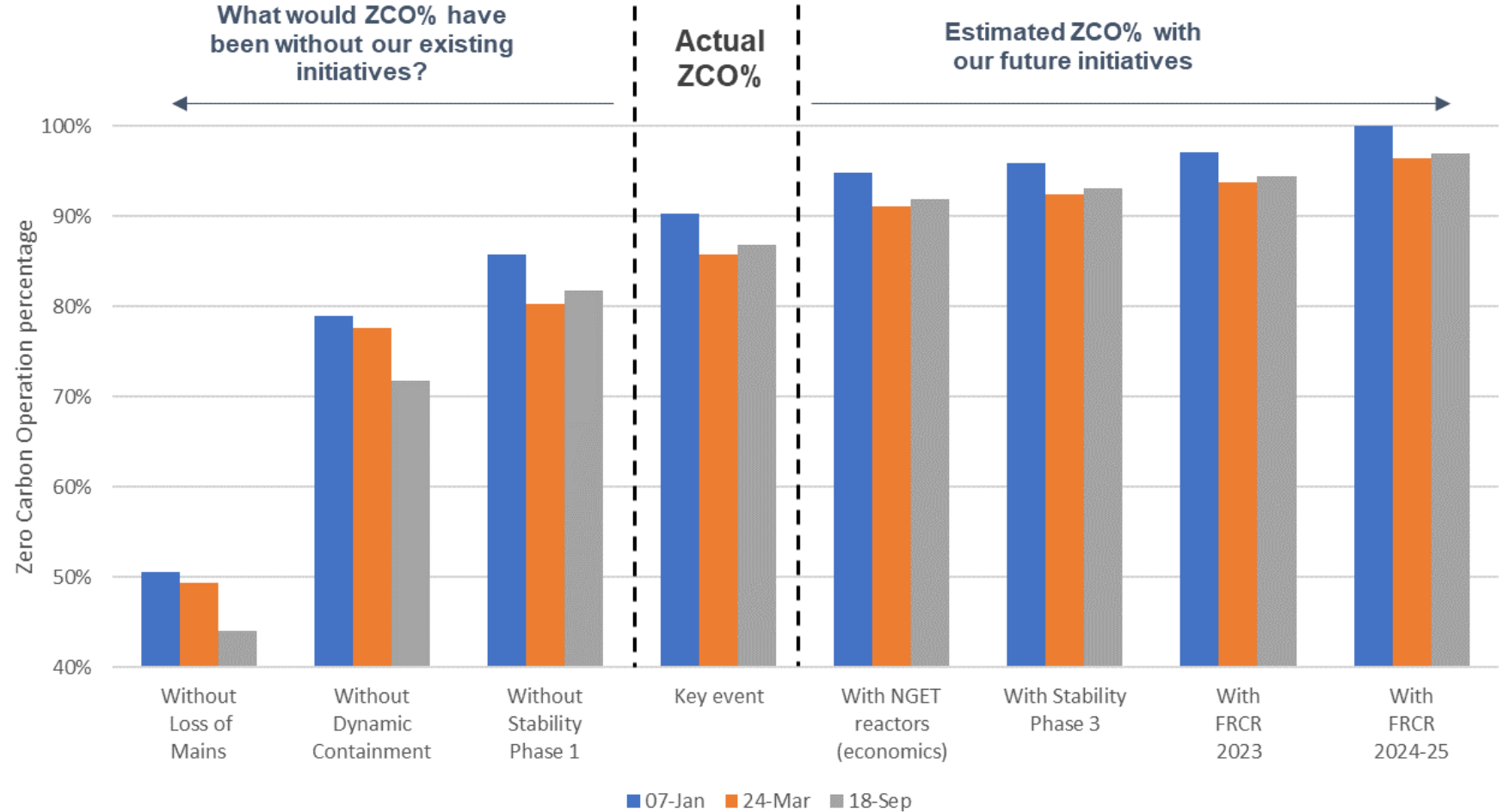
Zero Carbon Operability

Zero carbon operability

Key Events in 2023

- Highest ZCO%
 - 91%
- Lowest Fossil Fuel MW
 - 1500MW
- Lowest Carbon Intensity
 - 27gCO₂/kWh
- Highest wind output
 - 21.8GW

Illustration of impact of ESO initiatives on ZCO%

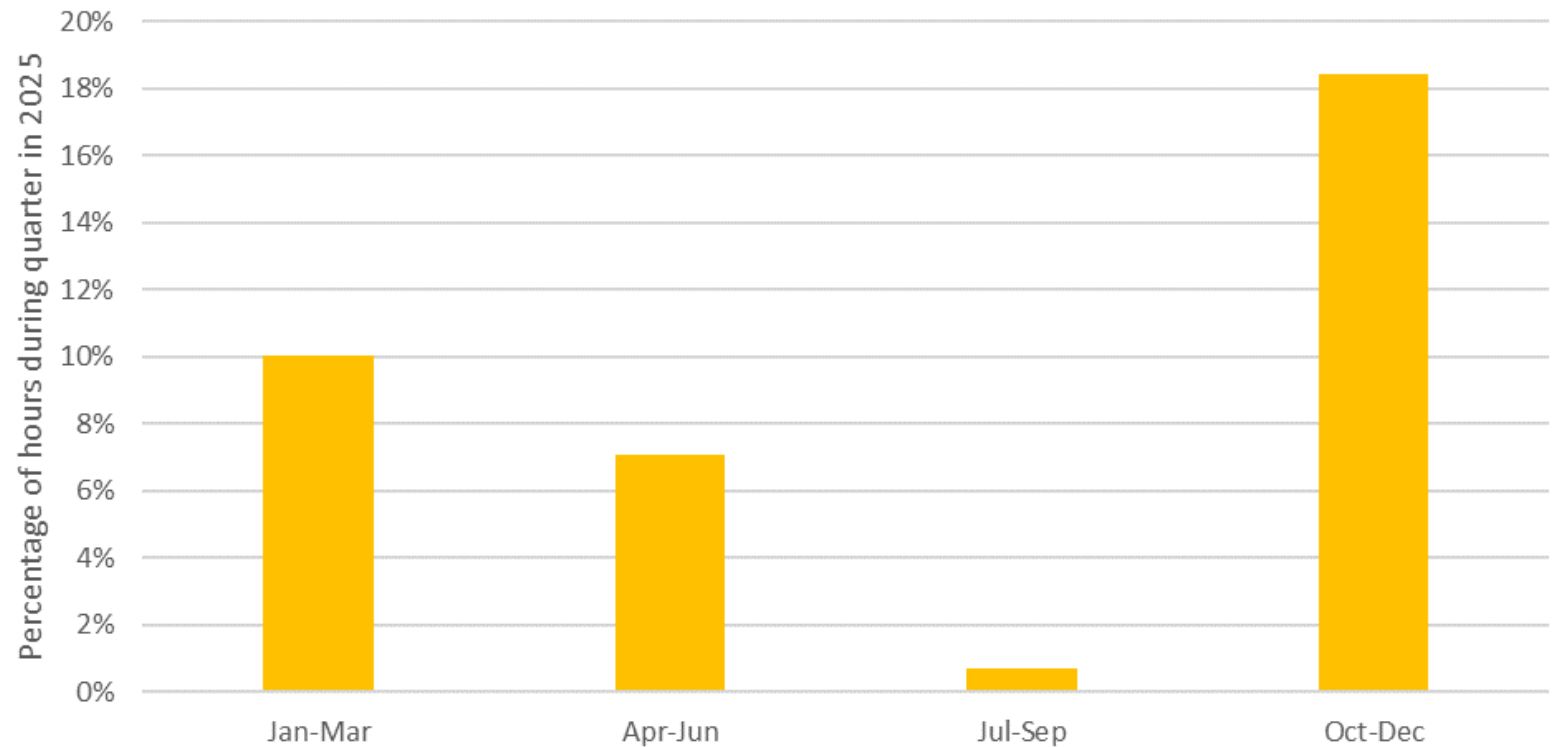


Zero carbon operability

Likelihood

- Market provided generation mix
- 27GW demand
- Average periods, not extremes
- Increases as more zero carbon generation connects
- Increases as our projects deliver

Percentage of hours in 2025 where Zero Carbon Operation could be possible



Decarbonisation



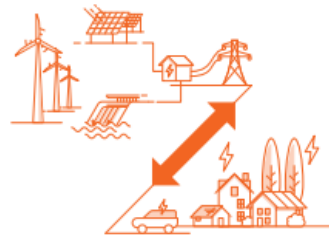
Less dispatchable generation



More asynchronous generation



More variable sources of generation



Generation moving to different areas



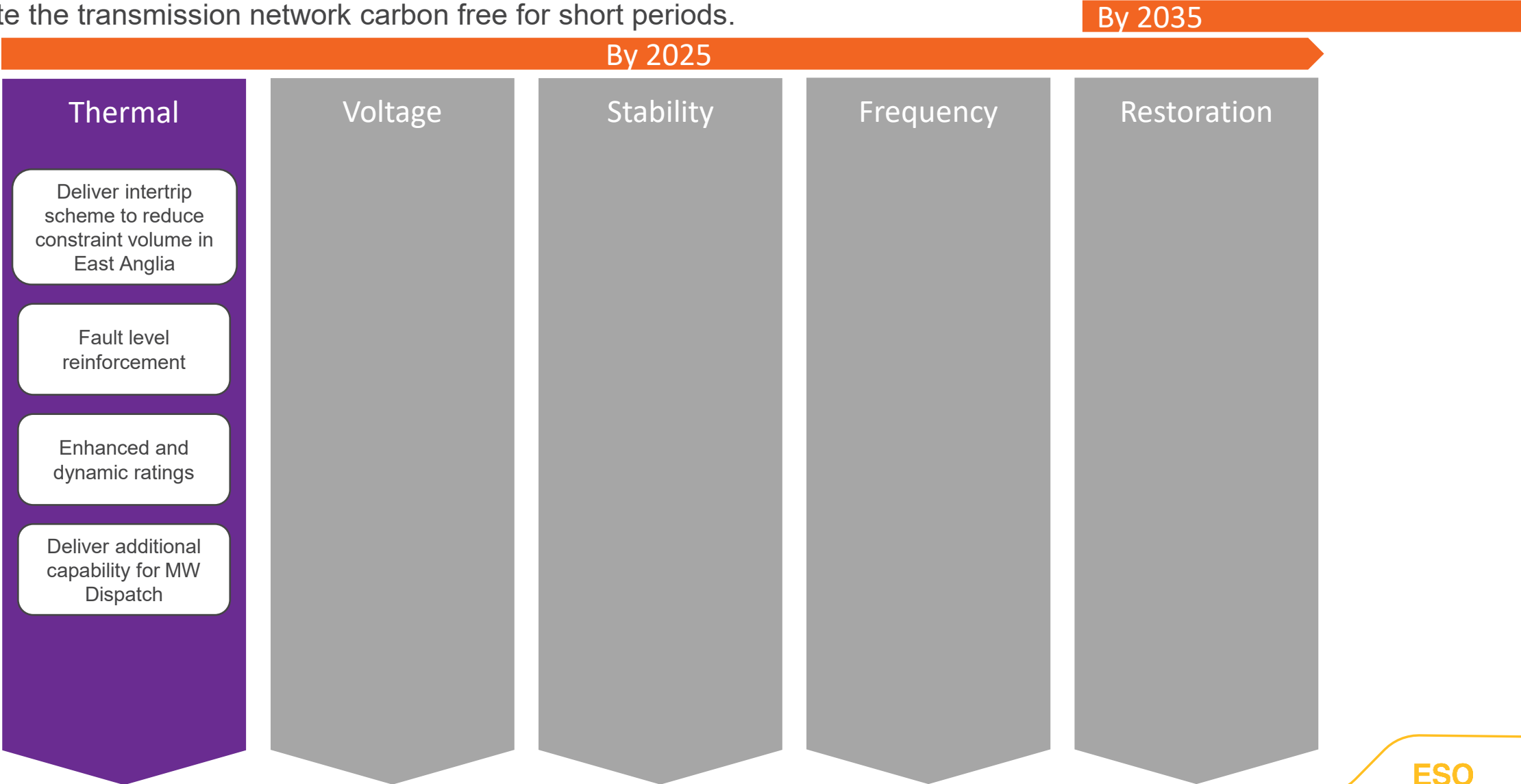
More variable and unpredictable demand

An aerial photograph of a lush green agricultural landscape, likely cornfields, with several bright yellow light streaks cutting across the scene from the bottom right towards the top left. The text 'Progress to our 2025 ambition' is overlaid in white on the left side of the image.

Progress to our 2025 ambition

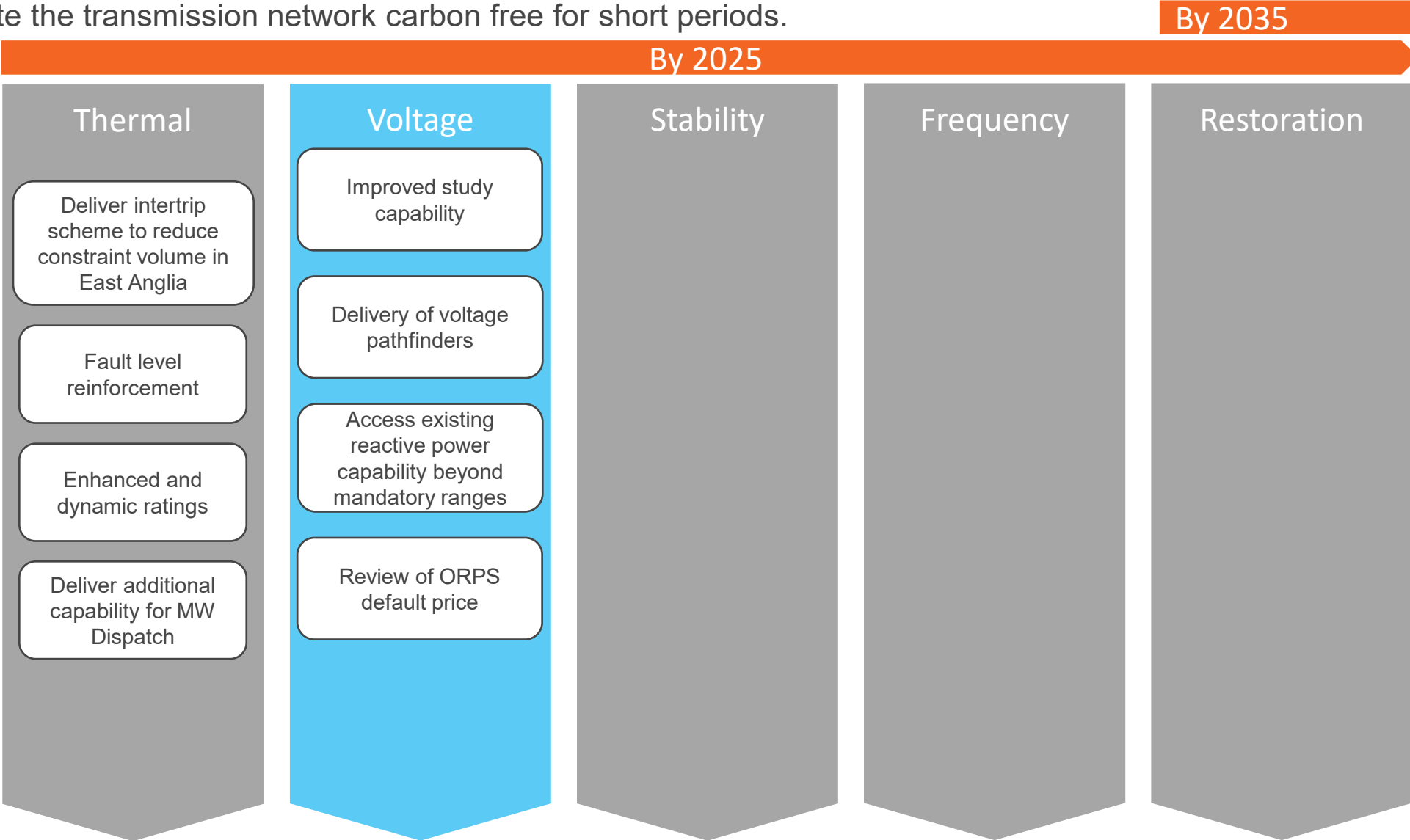
Our journey to zero carbon operation by 2025

By 2025 our plans will enable us to overcome the decarbonisation challenges and operate the transmission network carbon free for short periods.



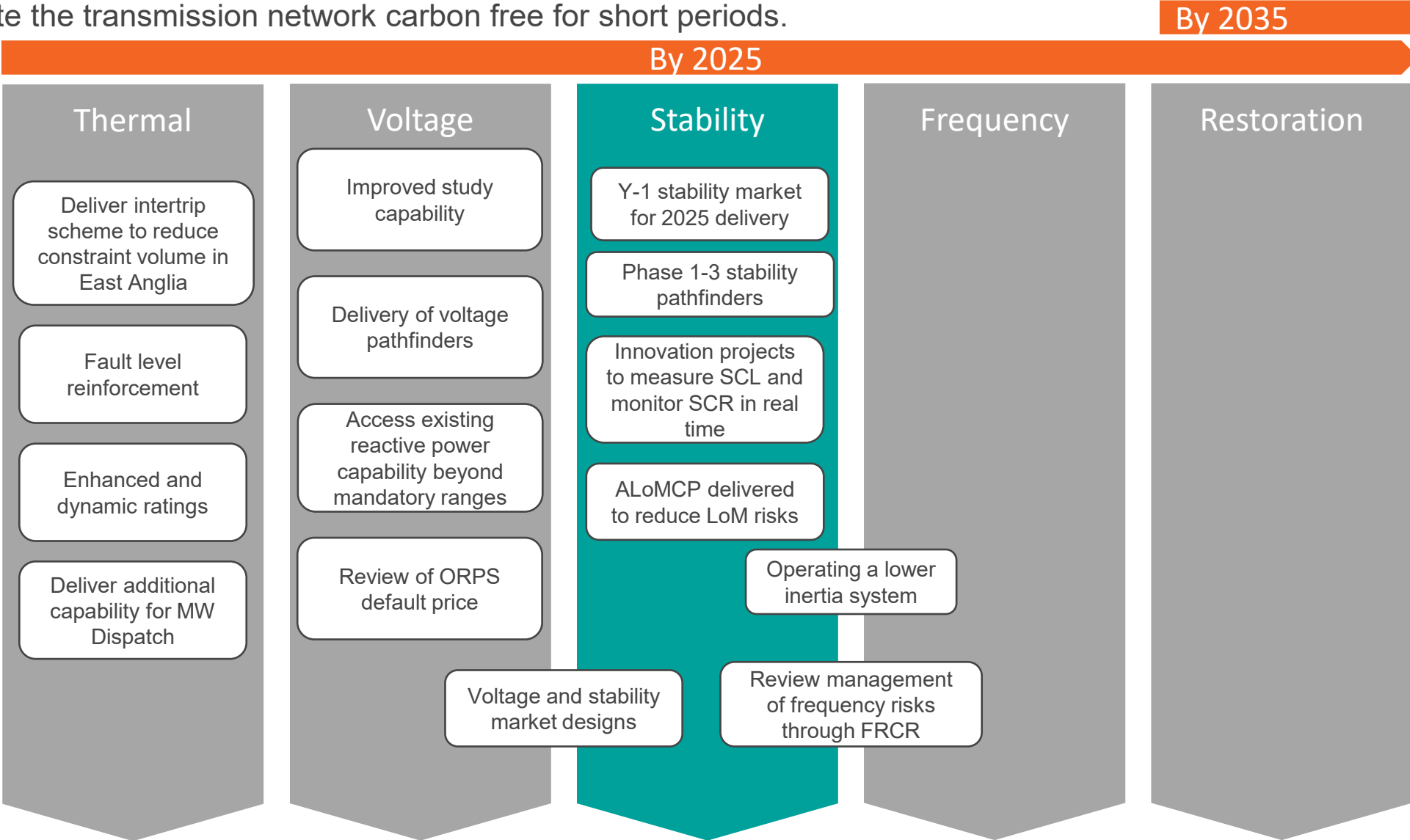
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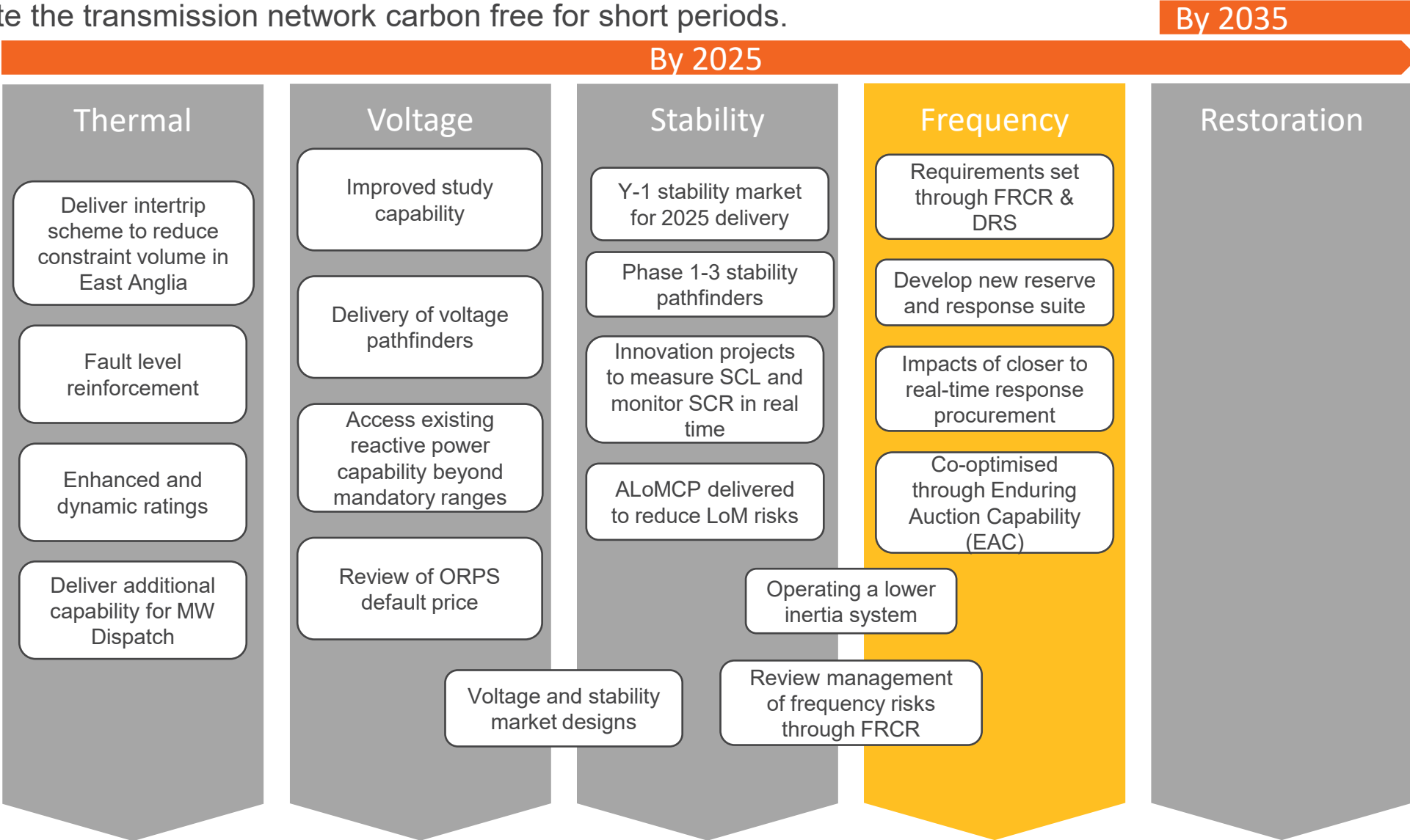
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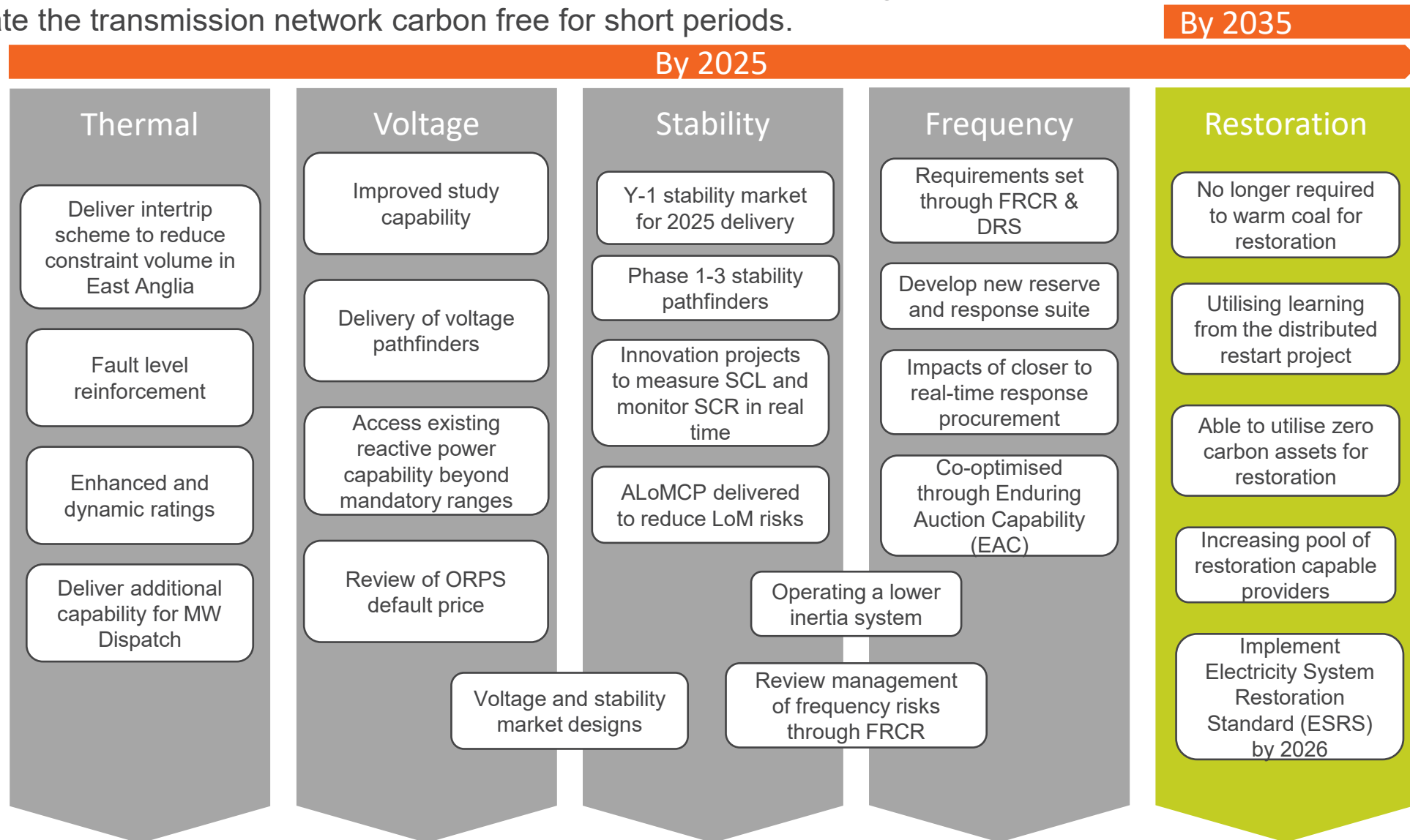
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An aerial photograph of a vast green agricultural landscape, likely cornfields, with several bright yellow light streaks cutting across the scene from the bottom right towards the top left. The text 'Reaching our 2035 net zero goal' is overlaid in white on the left side of the image.

Reaching our 2035 net zero goal

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We are already identifying system challenges and needs for operating a net zero electricity system by 2035 and are developing the necessary strategies and services to deliver new flexible services and overcome over and under supply of energy.

By 2035

Thermal

Voltage

Stability

Frequency

Within Day
Flexibility

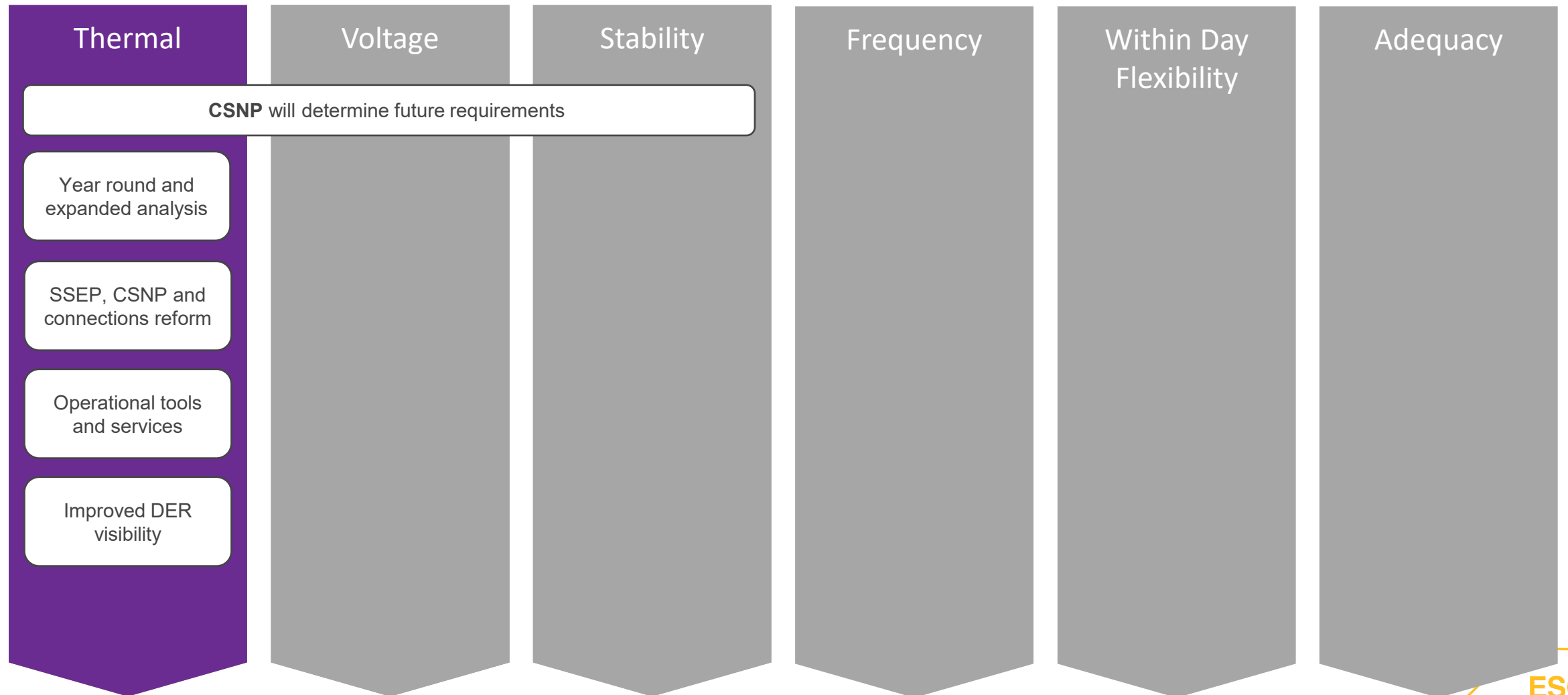
Adequacy

CSNP will determine future requirements

Reaching our 2035 net zero goal

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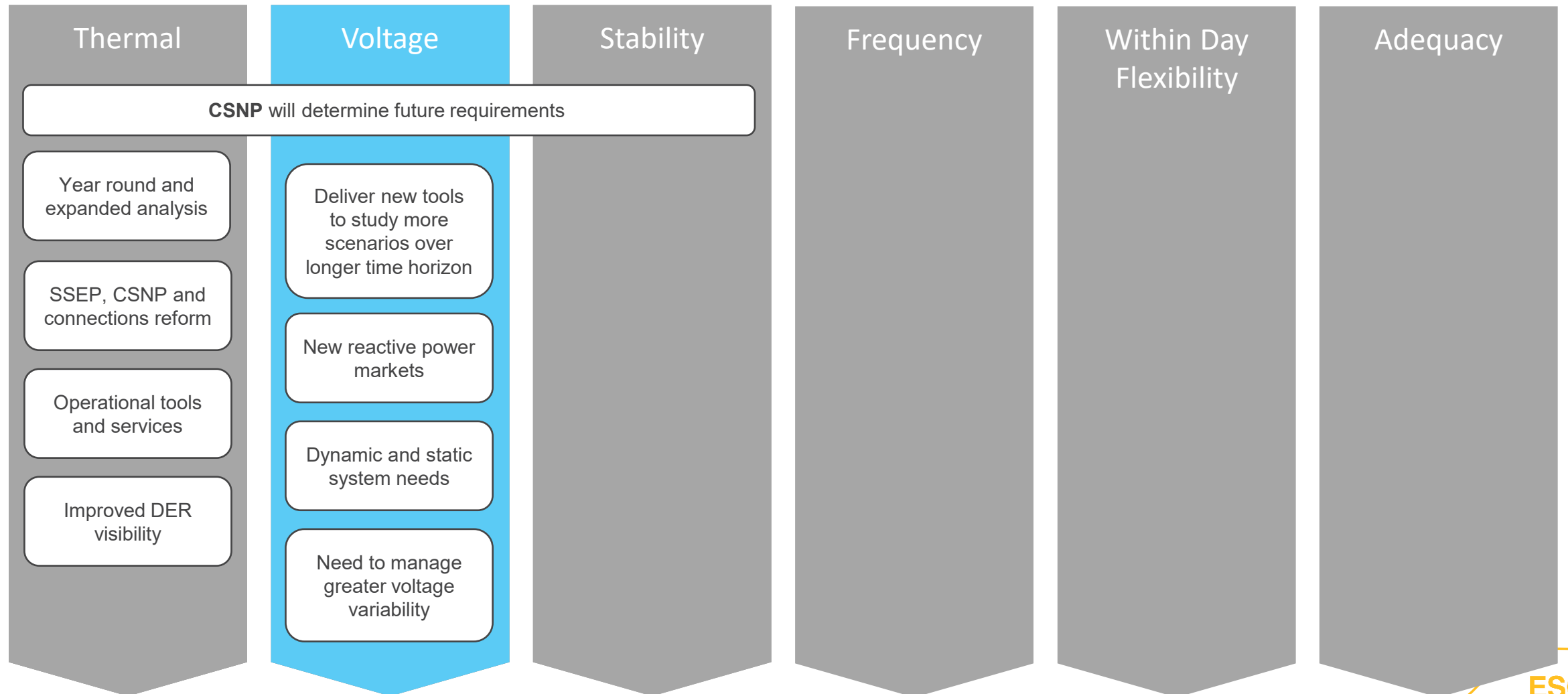
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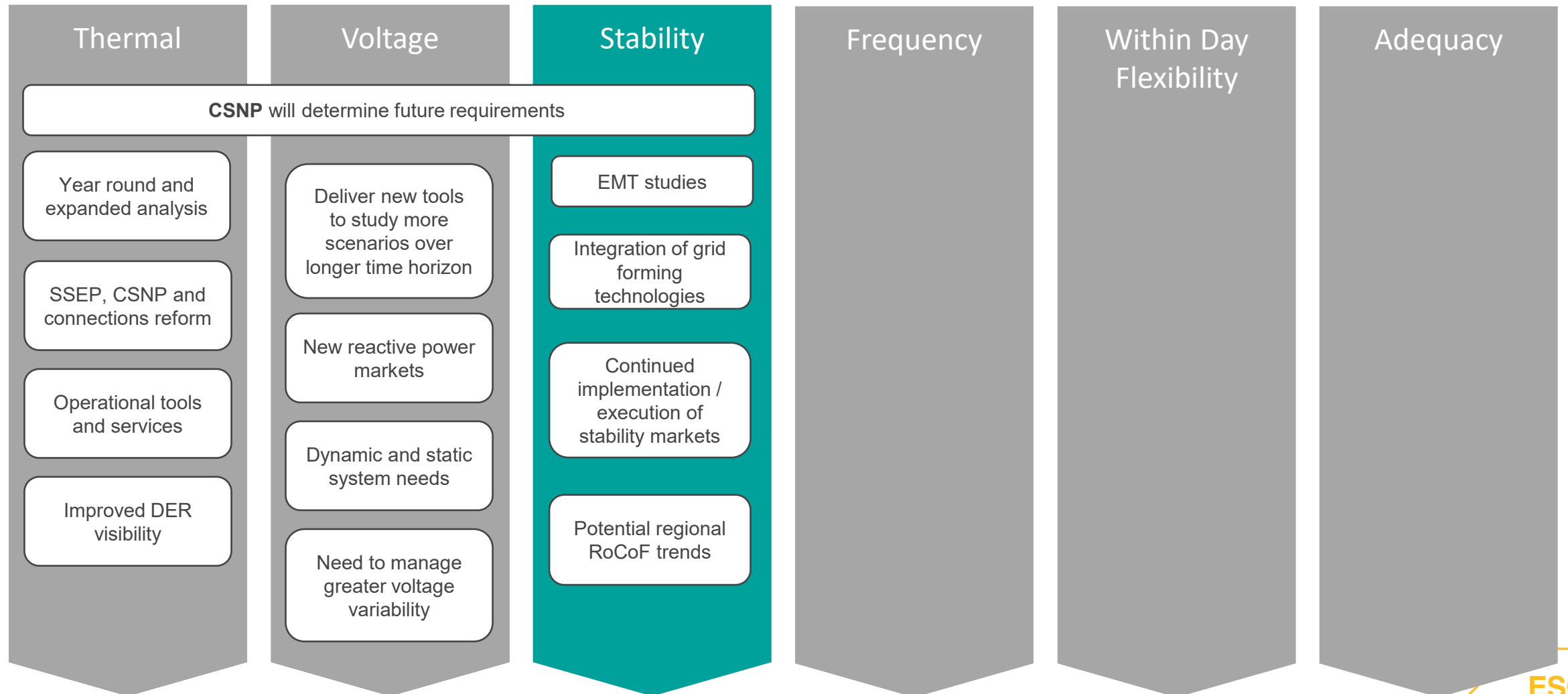
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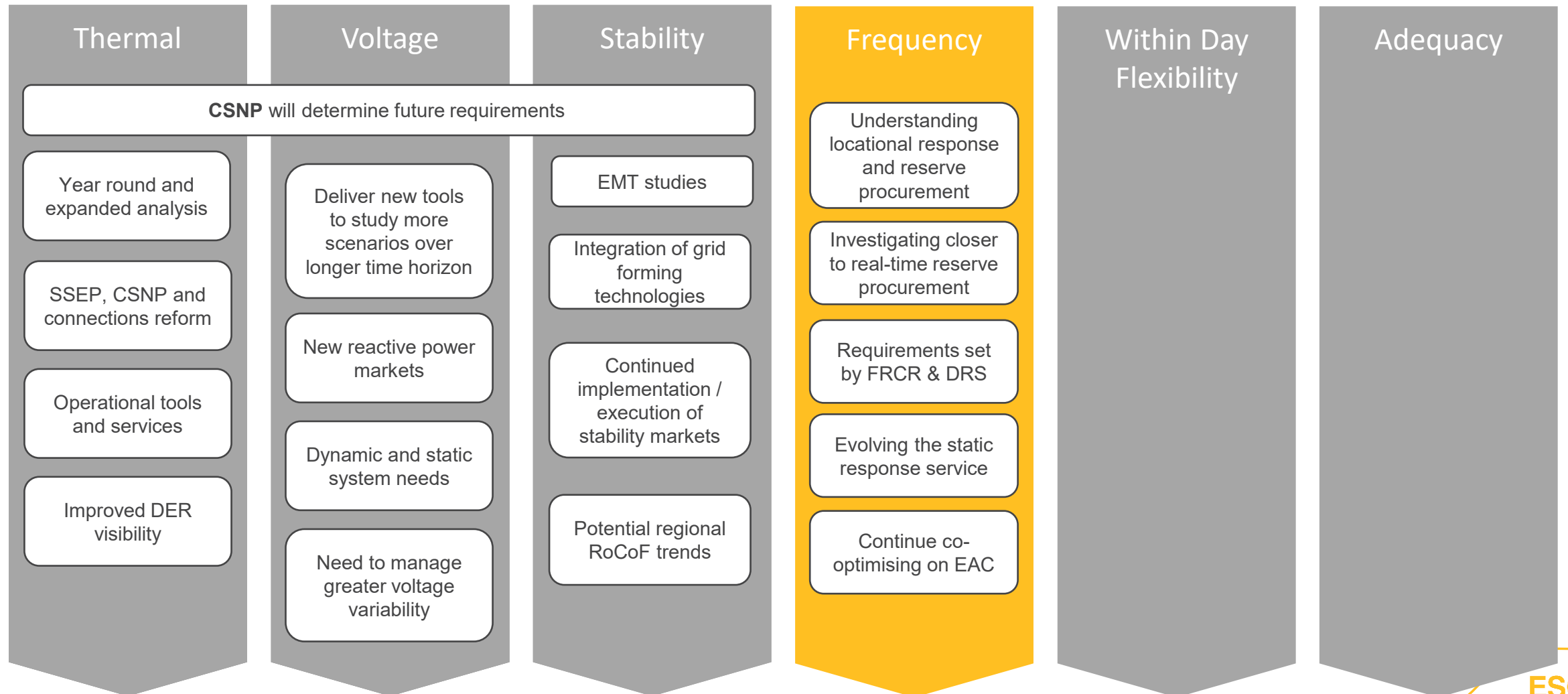
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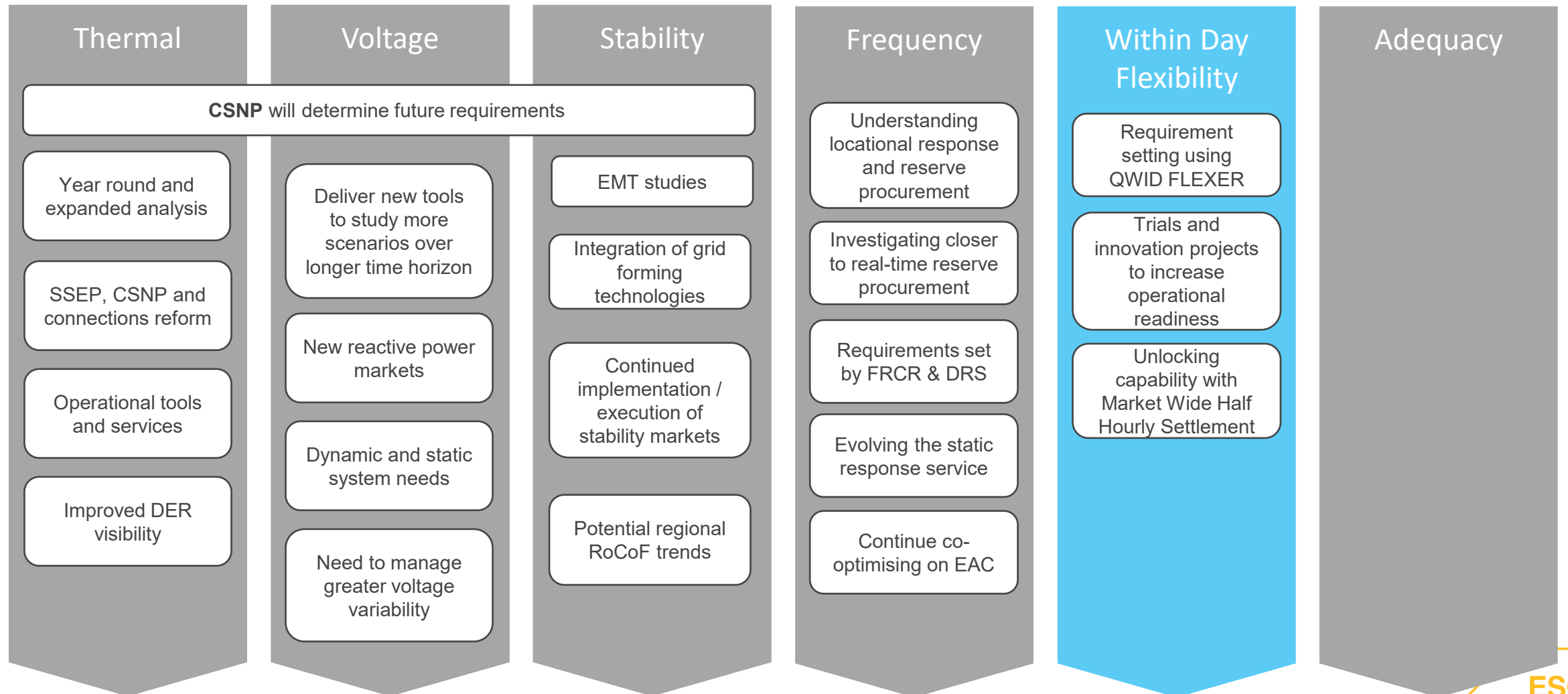
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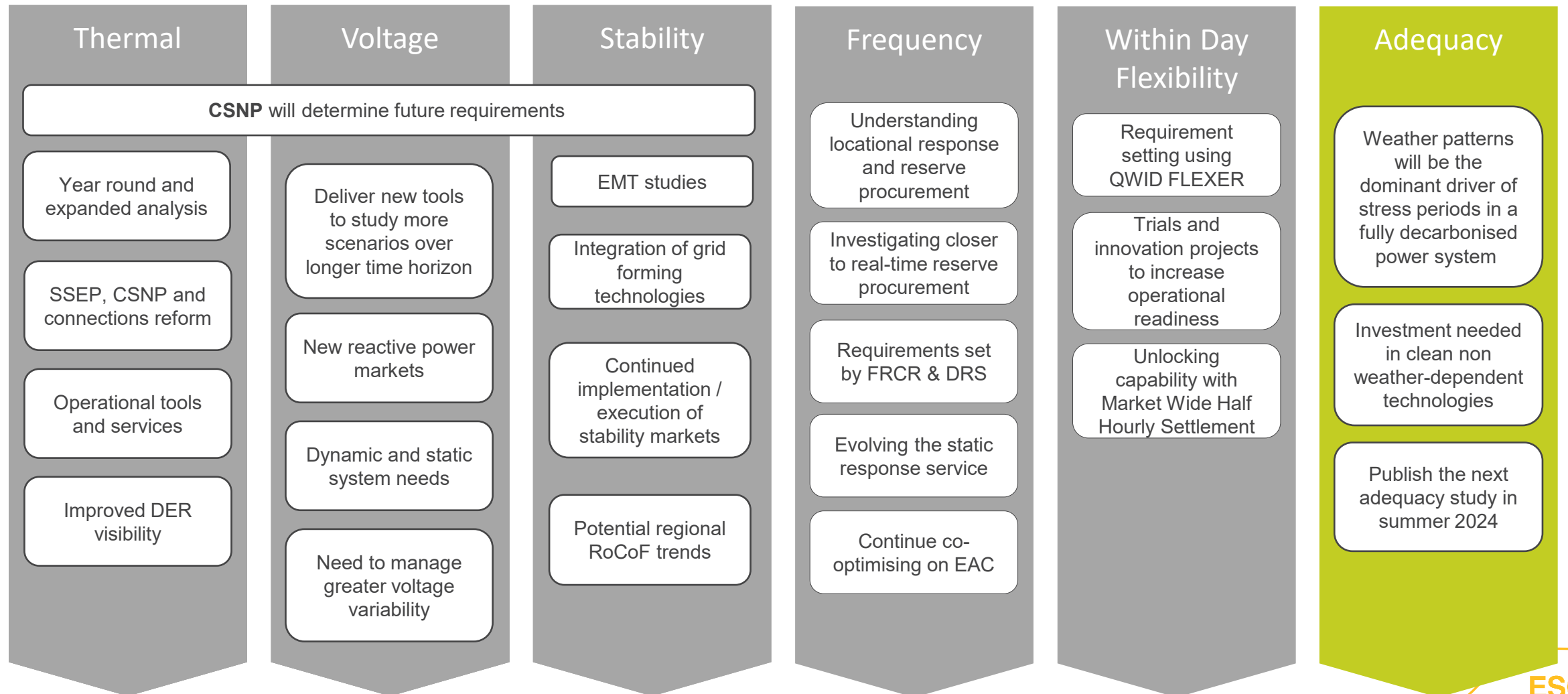
By 2035



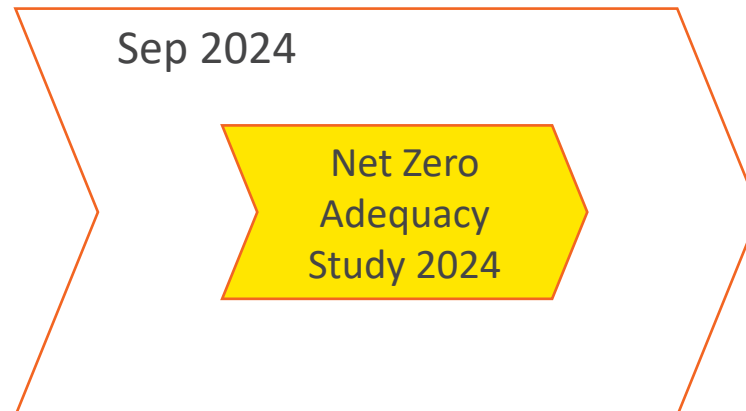
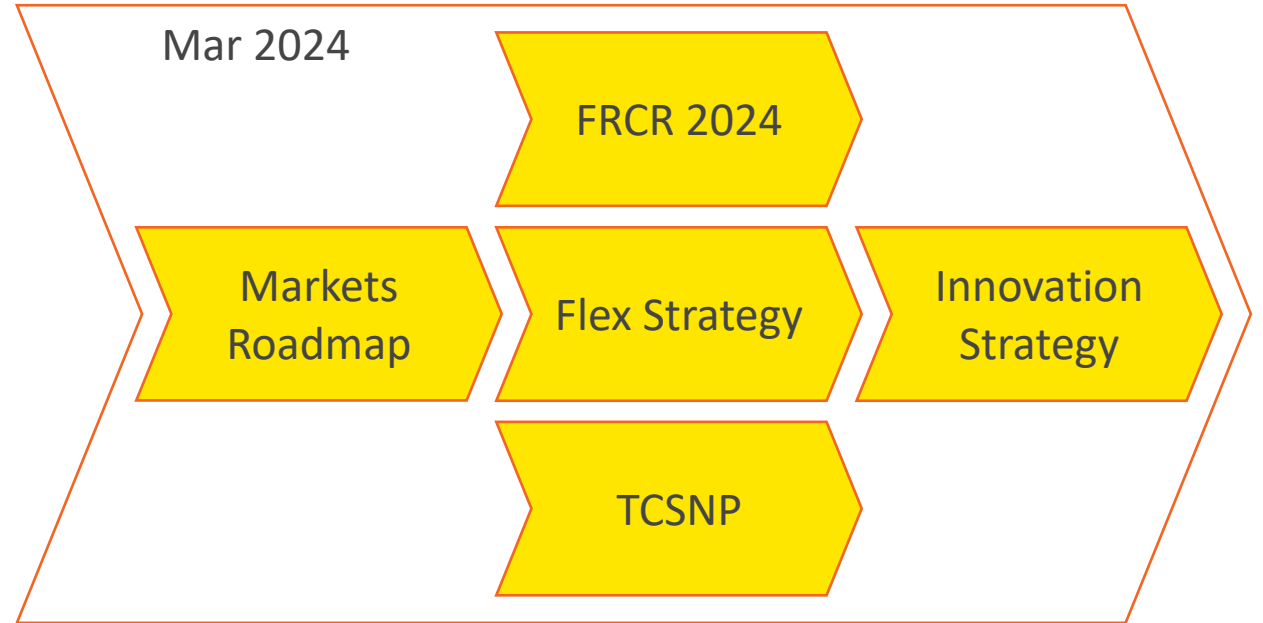
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By 2035



What's next?



An aerial photograph of a river with white water rapids. Several bright blue, glowing energy-like lines are superimposed on the left side of the image, curving and flowing downwards. The text 'Thank you' is written in white on the right side of the image.

Thank you