Identifying Isolated Microgrids in Rural Areas Using a Genetic Algorithm

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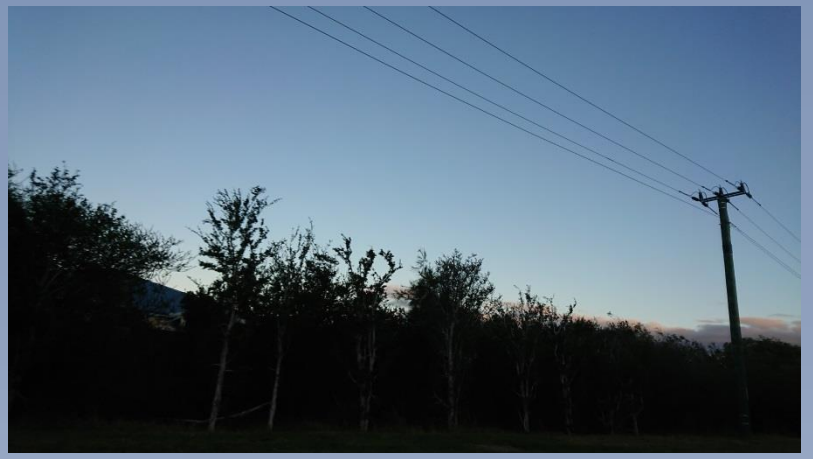
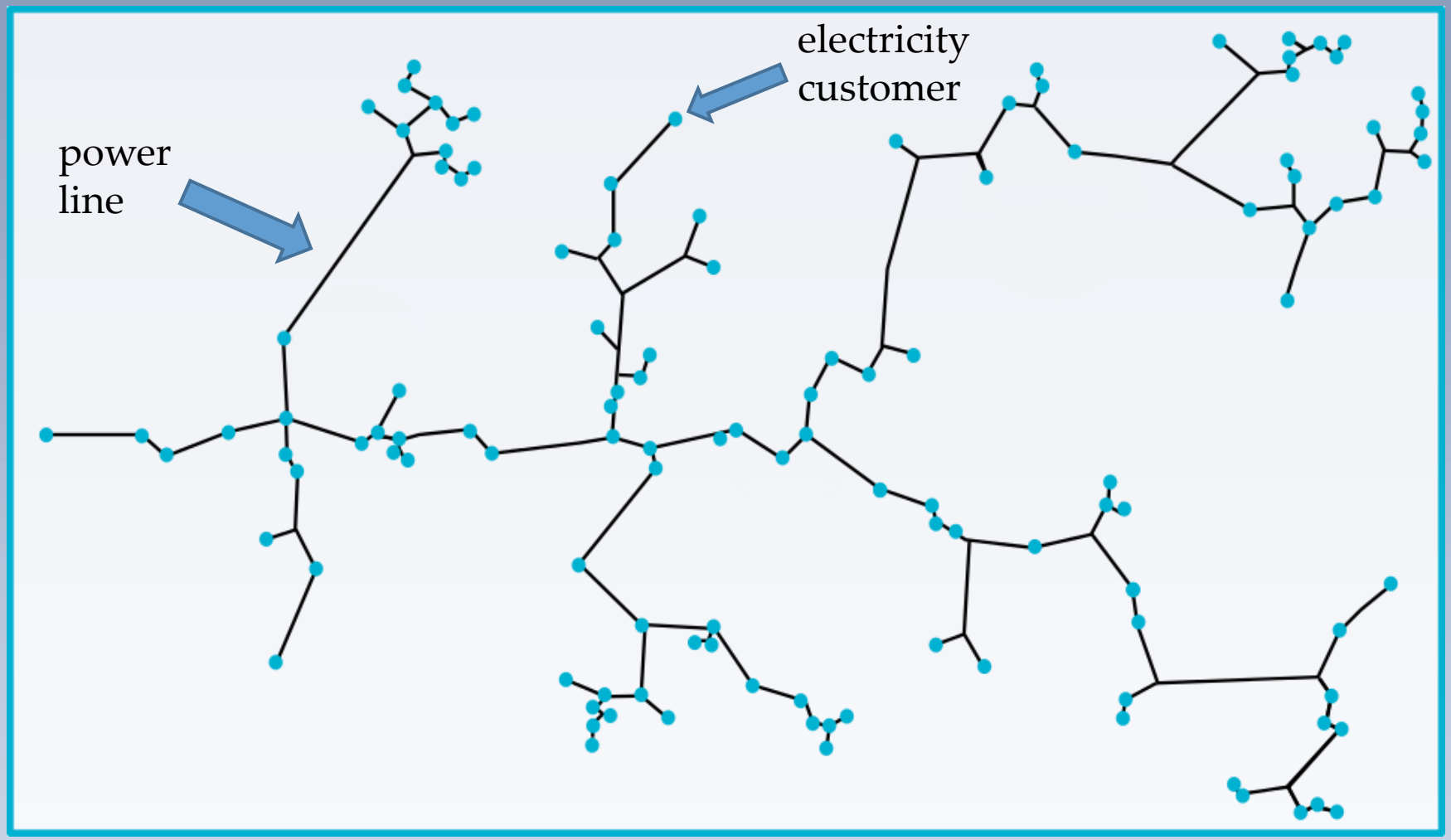
Motivation

Benefits of MGs and SPS:

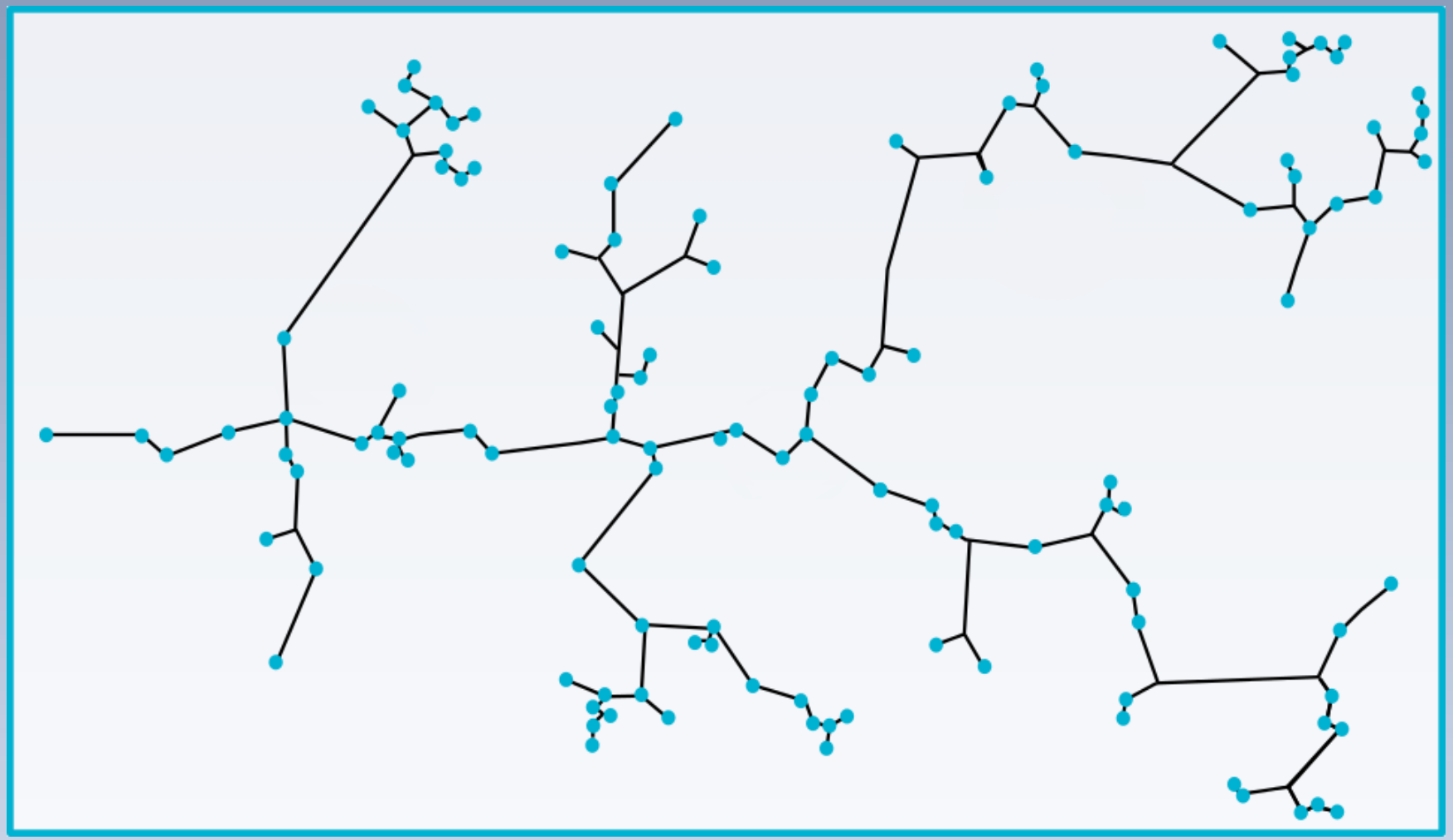


- Local power generation can replace long power lines:
  - Lower network costs
  - Improved supply reliability and safety
- High penetration of renewable energy resources

- Rural electricity distribution networks can be represented as graphs.



Aim: Finding an optimal network topology minimising the total network costs over a certain time period.



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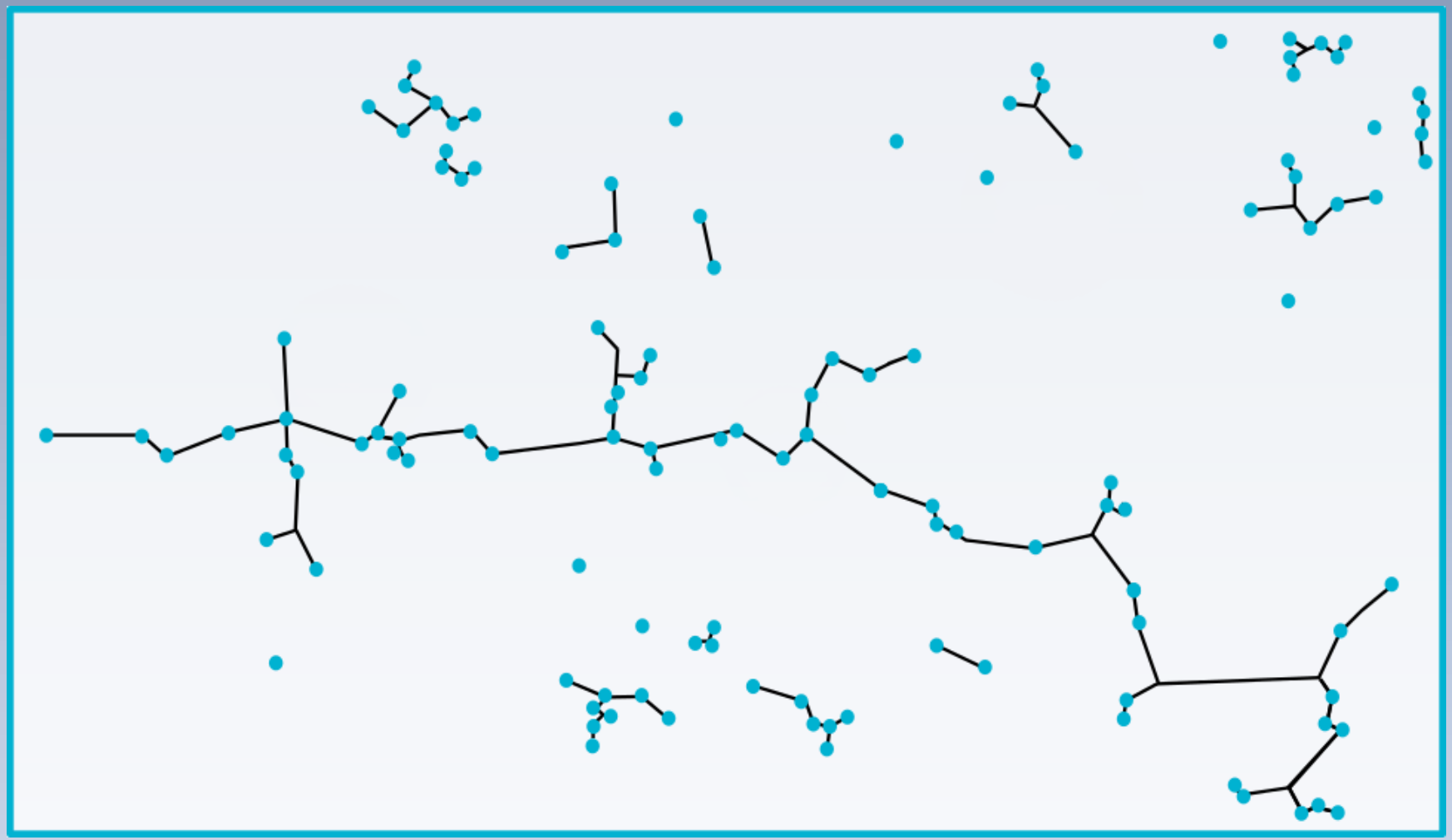
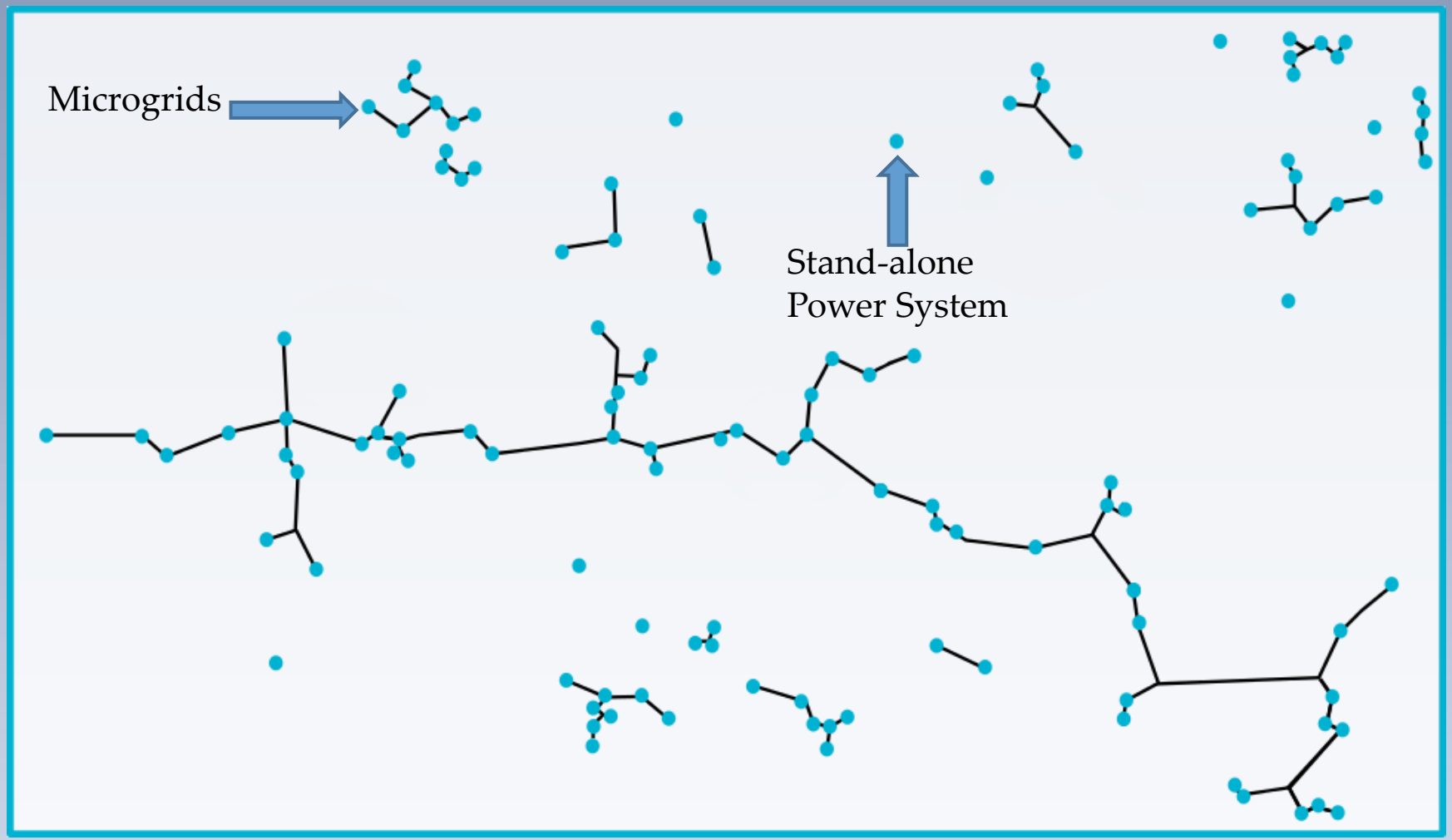
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