

TRANSPOWER



Leveraging digital substations for efficient infrastructure expansion

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Date: 22/11/2023



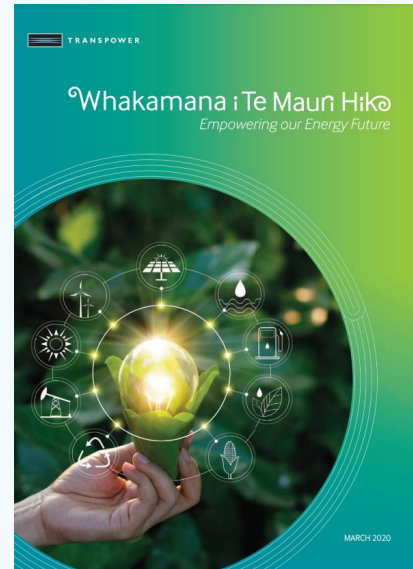
Agenda

- Challenges & Goals
- Digital Substation
 - Key Features
- Conclusion



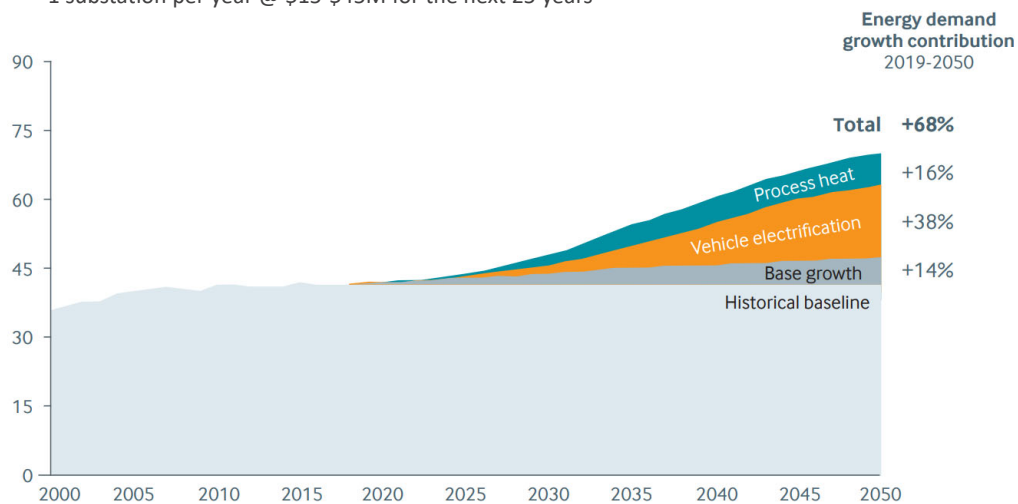
Whakamana i Te Mauri Hiko tū mai Aotearoa.

Empowering the energy
future for New Zealand.



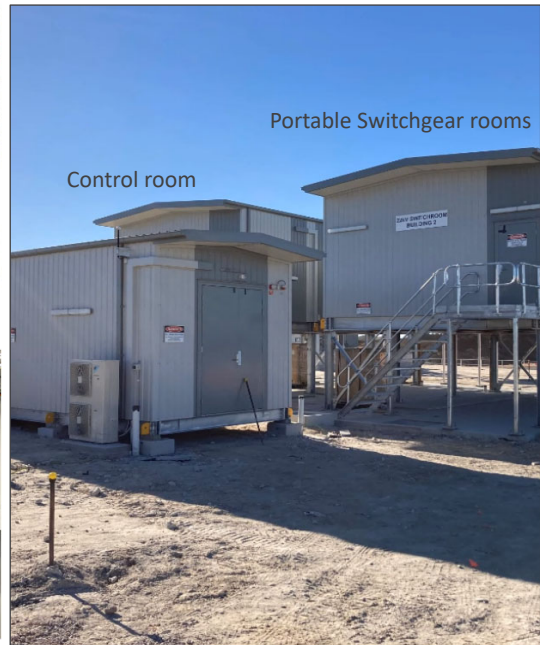
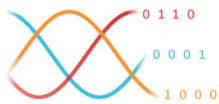
Challenges & Goals

- 1 substation per year @ \$15-\$45M for the next 25 years

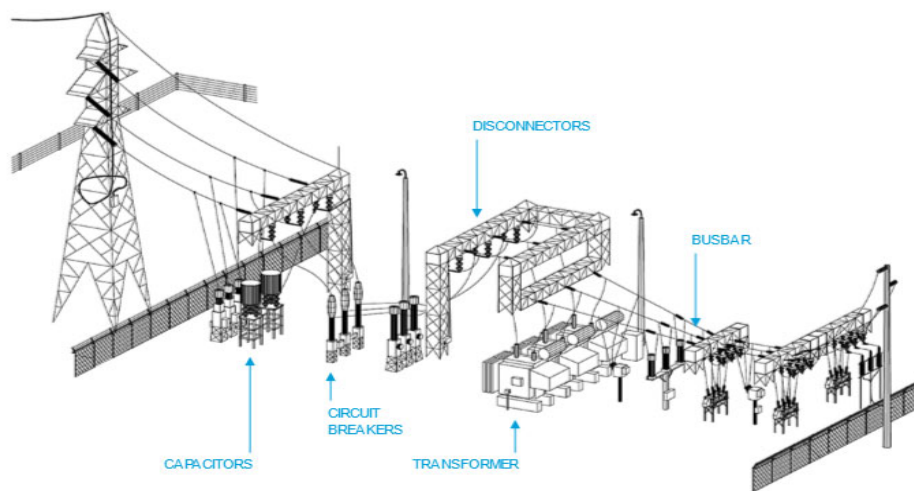


Digital substation

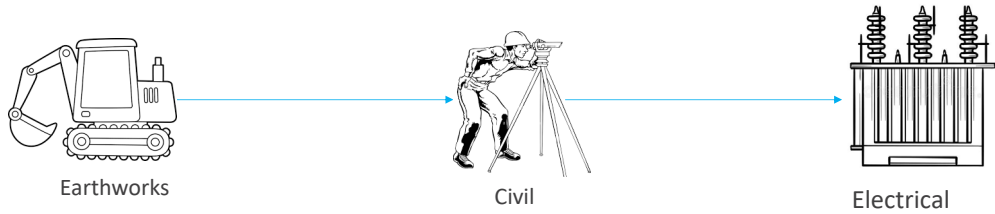
- Digitisation
- Communication
- Modular & Scalable
- Cost Effective
- Environment Friendly



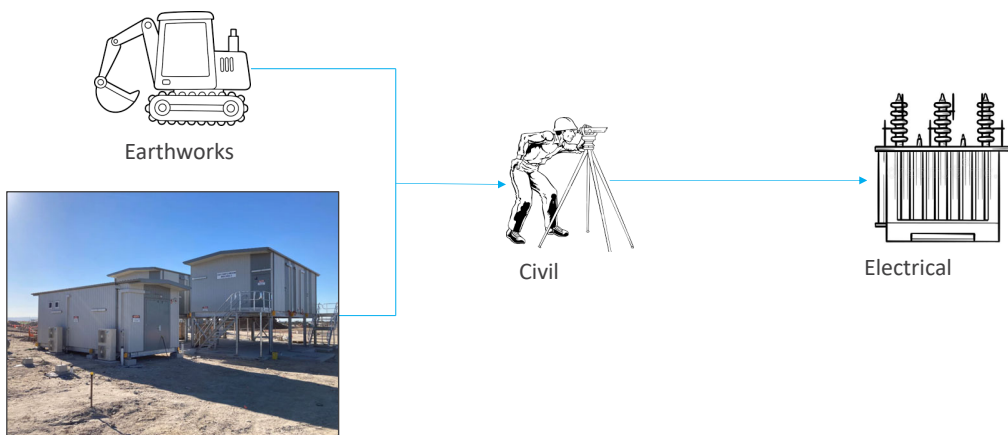
Traditional substation



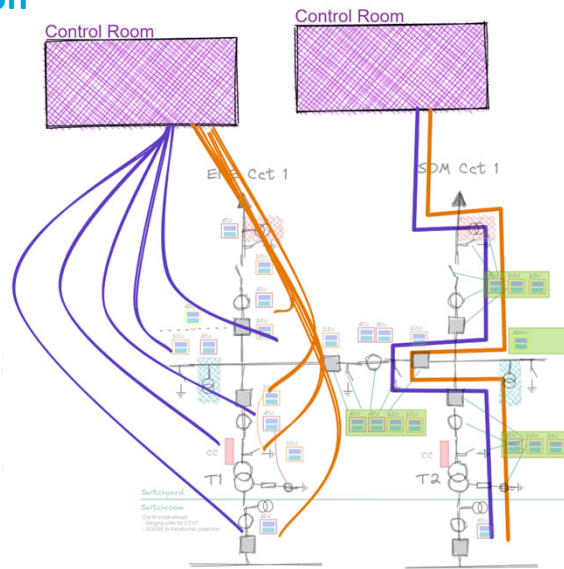
Traditional substation



Digital substation



Digital substation

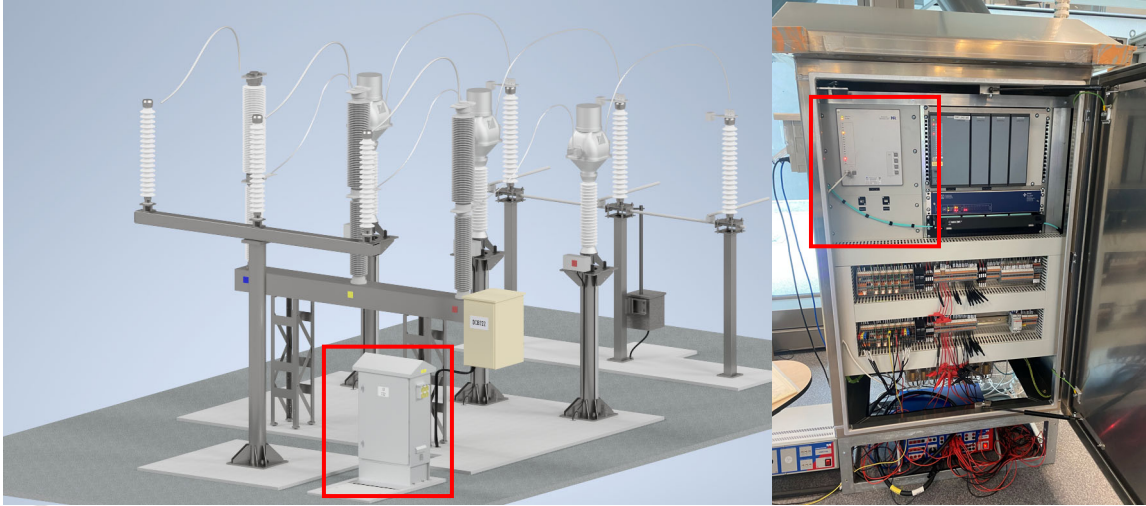


Key feature – Merging unit

- Copper Multicore to Fibre

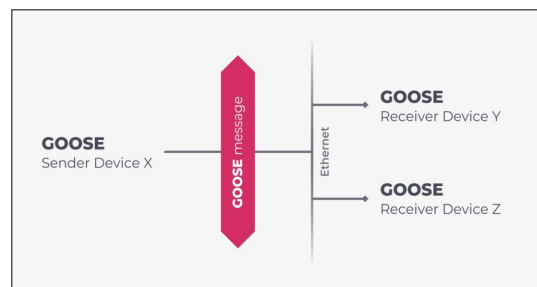


Key feature - Merging unit



Key Feature – IEC 61850

- Multivendor system (Interoperability)
- Generic Object-Oriented Substation Events (GOOSE)
- Sampled Measured Values



Conclusion



Thank you

Questions?

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