Electricity Distribution

EIP100 – AI for Connection Offers

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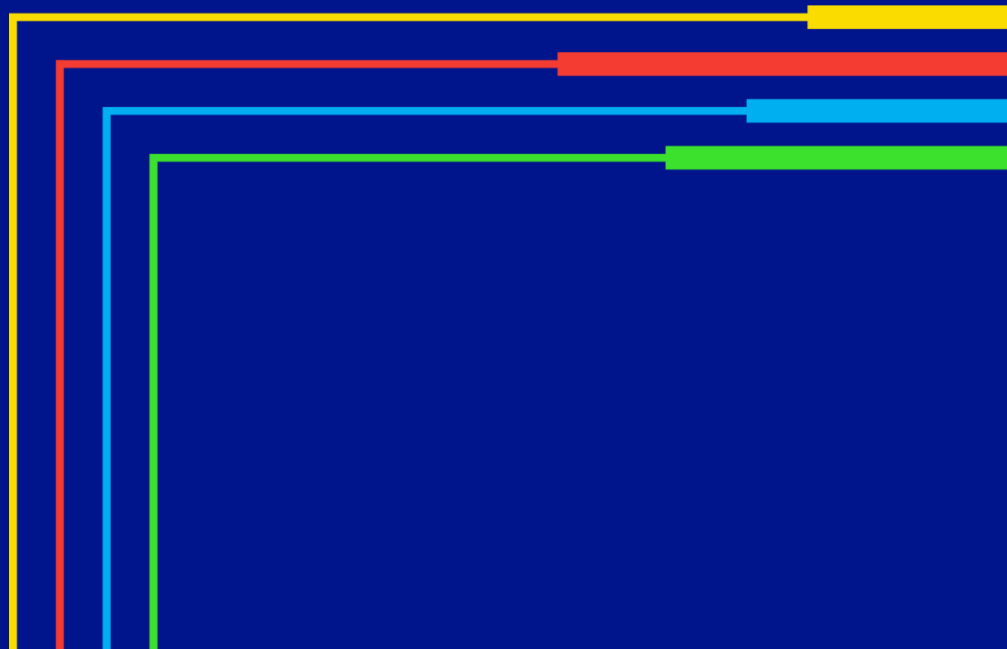
01

The Problem



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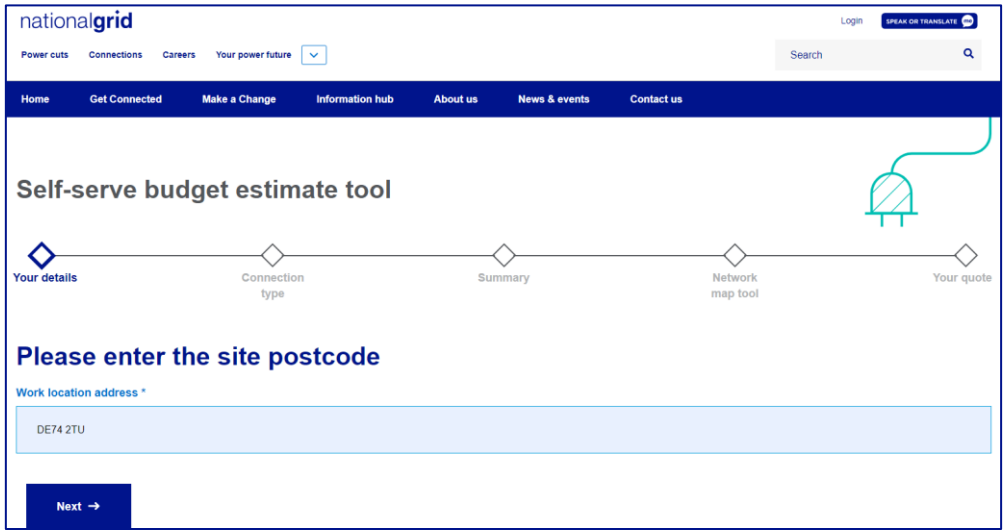
EIP100: Background

NGED has introduced an automated budget estimation process for LV connections (National Grid - Budget estimate) with further improvement expected in March 2024 – Click2Connect Tool to issue firm connection offers (up to 18.4kVA).



Connection application on HV, EHV and 132kV is currently much more complex and time-consuming process that requires contribution and coordination between a lot of teams across DNO/DSO business (i.e. connections, primary network design, policy, engineering design, network modelling, statement of works, wayleaves, etc).

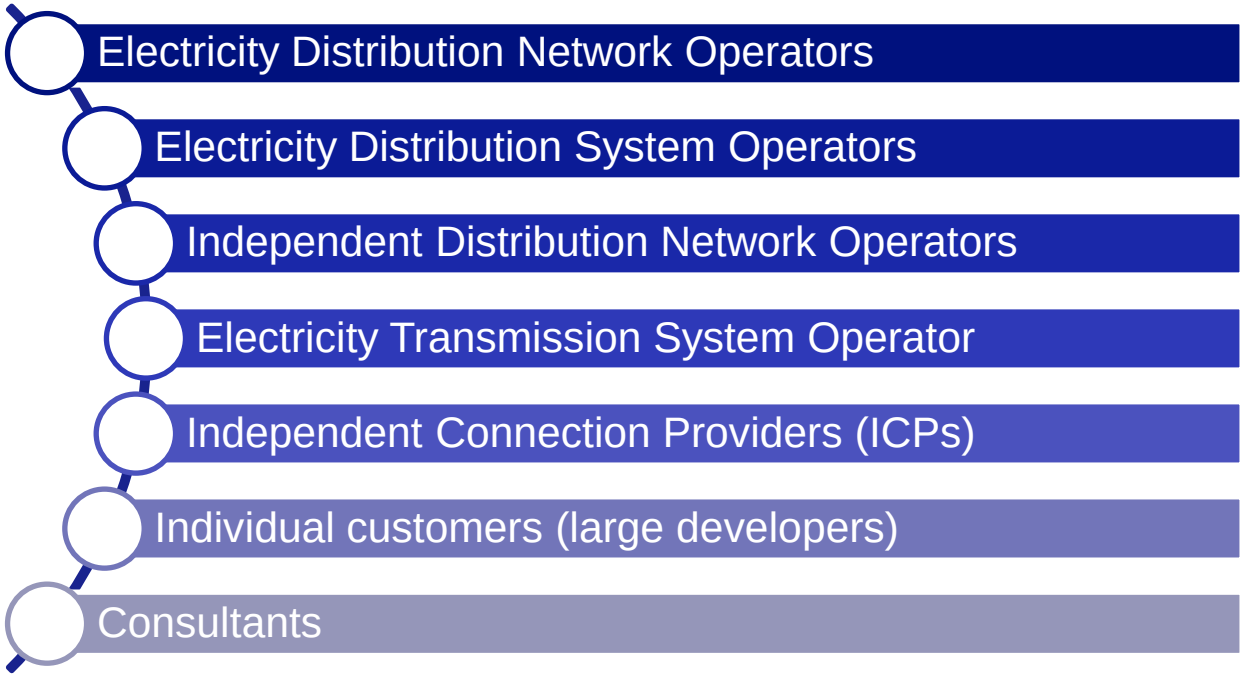
EIP100: Problem

We are looking to explore feasibility of using AI to:

- Review a customer connection application process for automation (HV radial initially, EHV and 132kV levels potentially)
- Explore whether network studies and design process can be automated and identify minimum data input requirements
- Explore whether AI can be trained to make recommendations for relevant connection offers
- Establish a procedure for automated offer generation and internal review (before issuing to a customer)
- Where an application is not suitable for full automation, are there any benefits from AI for faster or more accurate categorisation / routing?

EIP100: Background

Who are the key players:



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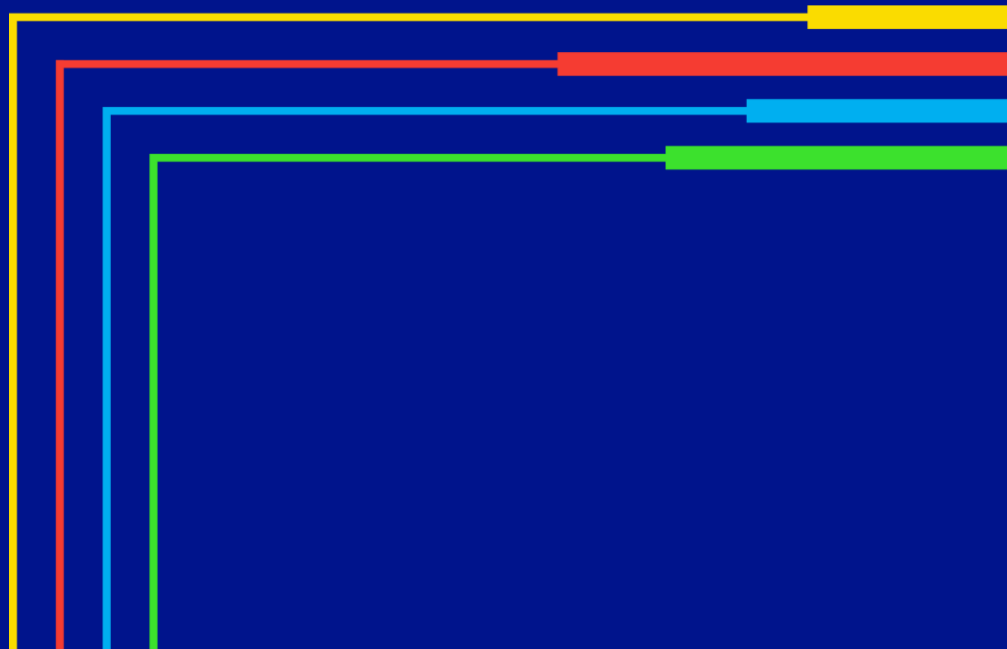
Expectations



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EIP100: Solution Expectations

Engagement with various teams across DNO/DSO business to establish minimum data input requirements for the system

Review existing systems and processes to establish blockers for automation

Ensure compliance with national and NGED policies for security of supply, competition in connection, licence conditions, etc. for automation

Ability to automate network studies and design process (initially focusing on radial networks only)

On the basis of the above produce most relevant connection option/offer for internal review.

EIP100: Solution Expectations

There are other related problem statements where there may be benefits from joint working;

- EIP105 Standardised Major Project Connections
- EIP103 Modular Standardised BSP

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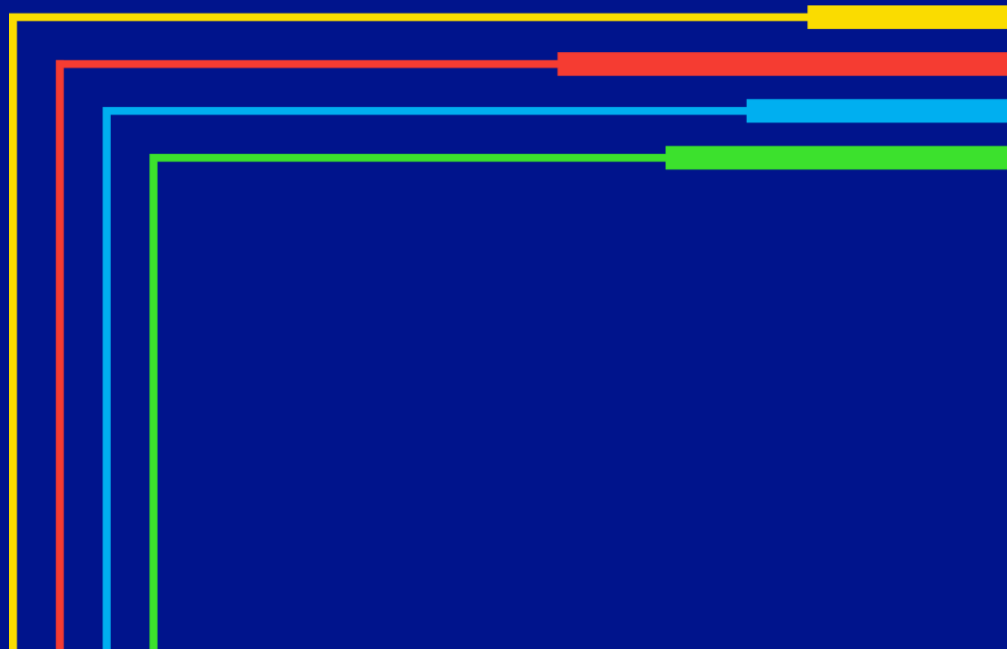
03

Contacts



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Contacts

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