# Model an effective future network with DPlan



DPlan, from our partners AmberTREE, is a next generation network planning tool proven to model innovative smart grids techniques on a number of Network Innovation Competition (NIC) and Network Innovation Allowance (NIA) projects in the UK

As energy, regulatory environments and utilities change radically, it is clear that a new energy world is coming. The challenges resulting from a low carbon society, along with increased customer and regulatory pressures, demand a far better understanding of grid behavior in order to make informed and timely decisions.

# BUSINESS AND MARKET CHALLENGES

- GB electricity network companies are transitioning to become
  Distribution System Operators to support delivery of Britain's
  legally binding Net Zero objectives and integrate greater levels of
  local no-and-low carbon generation and demand onto their
  infrastructure.
- This requires DSOs to be able to assess the impact of no-andlow carbon supply and demand on network capacity and model the impact of smart grid interventions in operational timescales.
- DSOs need to rapidly and easily model planning scenarios and generate accurate costs and detailed work specifications.

### **CGI SOLUTION**

DPlan bridges the gap between what legacy planning tools can achieve and the planning requirements of an infrastructure that enables a smart, flexible electricity system.

DPlan is particularly relevant for modelling smart grid interventions and the integration of low-carbon technologies. It helps optimise network investments, mitigate constraints and provide customer connections and reinforcements in the most cost-effective and efficient way. Basing planning decisions on a single, master set of data via CGI's OpenGrid360 Integrated Network Model enhances the productivity of any planning team and delivers consistent, reliable analysis and visualisations. It provides a robust and easy-to-use tool



# **Key Benefits**

- Delivers a single view of a utility's network model against which all data and applications can be assessed
- Enables data-driven insights to improve grid operation, network planning, investment and event management
- Drives new business models to meet changing customer demands
- Improves data quality through automated issue identification
- Enables faster adoption of emerging technologies and applications

## **Key Success Factors**

- Delivery of a reconciled, canonical network model
- Increased confidence in decision making through access to accurate data



for all planning needs, from investment planners to connections users, from EHV (Extra High Voltage) down to LV (Low Voltage).

**BUSINESS BENEFITS** 

- DPlan helps optimise network investments, mitigate constraints and provide customer connections and reinforcements in the most cost-effective and efficient way.
- Basing planning decisions on a single, master set of data (via the OpenGrid Foundation Integrated Network Model) enhances the productivity of any planning team and delivers consistent, reliable analysis and visualisations.
- DPlan provides a robust and easy-to-use tool for all planning needs, from investment planners to connections users, from EHV (Extra High Voltage) down to LV (Low Voltage), and is built from the ground up with the planner in mind, providing responsive feedback through continuous powerflow to let the planner perform their network studies efficiently and easily.

WHY CGI?

CGI is a pioneer of innovative technology in the utilities sector. With 6,000 consultants around the globe, we bring decades of experience in the electricity, downstream natural gas, water and waste water sectors. We work in partnership with our clients to deliver innovative solutions to their most complex business challenges, enabling them to succeed in their chosen markets.

We are enabling our clients to transition to a Net Zero energy system and generate value from the growing volumes of data available to them. We help them create insights, employ digital enablers to diversify revenue streams, support real-time operational excellence, and enhance customer experience, all whilst keeping their business secure.

In the UK, CGI has been a leading information technology partner on a number of innovation projects, including Low Carbon London and FALCON, making us the partner of choice to enable the DNO to DSO transition and deliver Britain's smart, flexible and sustainable energy future.

The implementation of DPlan into Business as Usual operation will demonstrate how innovation can be scaled, industrialised and commercialised to the benefit of all British DNOs.

#### **About CGI**

Founded in 1976, CGI is among the largest IT and business consulting services firms in the world.

We are insights-driven and outcomes-based to help accelerate returns on your investments. Across 21 industry sectors in 400 locations worldwide, our 77,000 consultants provide comprehensive, scalable and sustainable IT and business consulting services that are informed globally and delivered locally.

#### For more information

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