



# **LOCH NESS REGIONAL - WATER TREATMENT** WORKS (WTW) - NEW EXTRA HIGH VOLTAGE (EHV) / **LOW VOLTAGE (LV) SUPPLY**



In total IUS completed five individual service connections on the west bank of Loch Ness that formed part of Scottish Water's Regional Improvement Scheme. The scheme would provide an upgrade to resolve the water quality and resilience issues in the area.

# DESCRIPTION

Following extensive engagement with Scottish and Southern Energy Networks (SSEN) the Distribution Network Operator, IUS was able to develop several service options to facilitate the connection to the WTW. Within these options key considerations with other stakeholders were required, including with Forestry Commission Scotland, due to the sensitivities of the area.

IUS supplied and installed new 33kV overhead line construction. Approximately 950m of 95mm single core (triplex) aluminium 33kV cable was laid below the Forestry Commission Scotland access track, terminating at a ground mounted substation, which included a 33,000/433V, 500kVA transformer. A 300mm 4 core aluminium Wavecon cable was installed from the substation transformer, terminating at a 600Amp fused cut-out beneath the LV current transformer metering panel. The full HV and LV network was designed, procured, installed, tested and commissioned by IUS. On completion of the works to the adoptable standards of SSEN, the substation was energised. The WTW is now in full operation.

The works were undertaken during weekends only, to avoid disruption to the main site works.

### CLIENT

Scottish Water

### **PROJECT**

Loch Ness Regional -Water treatment works -Provision of new HV / LV supply

#### LOCATION

Invermoriston, Loch Ness

#### SERVICES PROVIDED

- Full design role
- Principal contractor duties
- Engagement with the DNO, Forestry Scotland, client's other contractors and all other key stakeholders
- All civil works
- Overhead line construction
- SAP duties
- Turnkey solution









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