



**Scottish
Water**
Always serving Scotland

Providing lightning protection for Scottish Water in the most extreme conditions



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PTSG secured a two-year contract with Scottish Water in July 2015 to provide annual inspections, testing and maintenance of their lightning protection systems over several different sites. These vary from waste water treatment works, clean water sites, depots and offices, all located throughout Scotland.

During the first year's maintenance work on these sites there were several initial challenges for the engineers. The first of these came with obtaining accurate contact details and plans for each site; but with a close working relationship with the procurement team these issues were overcome and the information needed to undertake an asset review and any remedial works was pulled together swiftly and efficiently.

Leadership and team meetings followed and all of the tasks were allocated in a way that meant the work could be started in a safe and efficient manner. PTSG's and Scottish Water's engineers then set to work, delivering the inspection, testing and maintenance work within the agreed timeframes – despite some of the coldest and windiest conditions imaginable.

An important element of the niche, expert services provided by PTSG is the requirement for specialist training that must be undertaken to gain access to its clients' sites – all sites are different and have their own unique requirements and challenges. In this case, all of the engineers involved in these works had to complete a full-day training course on Scottish Water's health and safety requirements, alongside their Distribution, Operation and Maintenance Strategy (DOMS), in order to gain the necessary access and hygiene ID cards.

This level of in-depth training ensured that no stone was left unturned from a health and safety perspective. It also meant that everyone understood exactly what successful completion of this work would look like, and their individual and collective roles, responsibilities and accountabilities in delivering the work.

Following the first round of visits to Scottish Water's sites, PTSG's engineers highlighted a number of repair works required for their lightning protection systems. The restoration of these important assets would allow Scottish Water to regain compliance with their own design standard.

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Several of the sites worked on by PTSG were located in very remote parts of Scotland, including Shetland and Orkney, and these unique locations added access and logistical pressures to the team. Complete co-operation and careful planning and delivery would be the key to a successful outcome, ensuring that all work is carried out safely, on time and within budget.

Angela Dron-Innes, PTSG's central point of contact at Scottish Water, helped to ensure that both companies knew exactly what was happening, where and when. Craig Finney, Operations Manager for PTSG Electrical Services, said: "Having a proactive contact like Angela, who knew the ins and outs of Scottish Water's remote sites, was incredibly valuable, and really cut down the time we needed to spend figuring out the logistics of these jobs, particularly in accessing the sites by unconventional means, including local ferry services."

Another challenge presented by the inaccessibility of these sites had meant that, prior to PTSG receiving this contract, maintenance works had fallen behind the ideal schedule. Having not had regular maintenance, the scale of the work needed was much bigger than anticipated. The two teams worked closely together to find the best and most cost effective solution.

PTSG knew how important it was that the financial burden of this work on Scottish Water was lessened, because as a publicly owned company it has a heightened responsibility to manage its budget responsibly. Without cutting corners in any way, shape or form, PTSG's engineers categorised each repair task according to three categories: immediate works, six-month works and recommended works. This allowed Scottish Water team to distribute its budget accordingly over the 12-month period, and indicated PTSG's understanding of how the business needs could be met without compromising safety and the quality of the work.

