



Aires Wind Farm, Newton Stewart

### Summary

I&H Brown Civil Engineering Ltd were contracted to provide a 35 MW windfarm at Low Airies Farm, approximately 12km Northeast of the town of Glenluce in the South West of Scotland. The overall site spans 271.5 hectares (ha) and has elevations of up to 150m above the UK sea level. The North, East and Southern sloped site boundaries meet forest with the western site boundary bordering a body of water. Submitted to the planning process in August 2012, the sloped greenfield site encompasses 14x 137meter wind turbines. The project finally entered the construction phase in August 2015 which immediately proceeded with the creation of a 1km access road through forests to the designated site area. Peritus were then awarded the security contract for the project in March of 2016.

### Project

Site access from the main highway leads through 1km of woodland, on a purpose-built road which connects to the site compound. Immediate

identified risks to the site came through the purpose-build road which had quickly become abused by local 4x4 drivers who used the road during the night to perform dangerous highspeed manoeuvres up to and around the compound. Additionally, the surrounding woodland and site area was stalked by local deer hunters whose practice was identified as a potential threat to construction personnel due to possible injury from accidental ricochet.

Due to the length and design of the access road, which was surfaced with 6F5 aggregate, made accessing the site on foot hazardous at any time of day. By night, due to lone working concerns, patrols via the aggregate road were deemed too dangerous to permit since the site area and road was only naturally illuminated and frequently subject to total darkness. The surrounding landscape also hindered communications with effective mobile reception often sporadic. Due to the remote site, all site electricity was generated via a diesel generator which was monitored and replenished by the guarding operatives. The





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surrounding landscape was worked by a local farmer who accessed areas beyond the site and required access to the adjoining area at all times.

### Services Required/Delivered

Peritus entered deployment in March 2016 and moved immediately to installing a padlocked gate at the aggregate road entrance off the highway. To guarantee the local farmer maintained access to the surrounding area both gate keys and the relevant site management contact details were made available ensuring the location was at a basic level restricted to authorised personnel, preventing various easily attributable threats. An agreement was then reached with the local deer hunters who opted to avoid entering a 2km radius surrounding the compound for the duration of the project.

To secure the site's compound, plant and machinery, Peritus geo-mapped the entire site area. Geo-mapping provides means to determine the location, via GPS mobile tracking, of active patrolling carried out on site. The risk assessment then narrowed its focus to concentrate on building a security strategy pertinent to protecting assets within the compound, turbine deployment and assembly areas by means of tracked flexibly scheduled guarding patrols.

Due to the lack of illumination, site guards were instructed to wear head torches and carry additional backup lighting when on patrol. An agreed safe patrolling zone was determined with the guarding operatives who are GPS tracked within the agreed safe area. GPS tracking provides the Peritus control centre with the means for real-time oversight should the guarding operatives enter those geo-mapped areas designated as hazardous. This GPS tracking feature will, should the guard move out-with their designated safe area, send immediate warning alerts to the Peritus control centre. Automated contact with the call centre will prompt call operatives to establish



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contact to determine the guard's situation and establish why there has been deviation from the agreed patrolling route. Contract between both guard and control centre will occur throughout each deployment with further automated GPS alerts made to the control centre should the GPS signal remain static over a defined period.

The security provision for the project was allocated between 7pm and 7am between Monday and Friday with a 48hour continuous provision between Friday 7pm and Monday morning at 7am fulfilled by 3 rotating guards working within the lone working deployment. To support the local economy each of the three positions were filled with the support of the local job centre in Stranraer which ran an advertising campaign to source 3 SIA accredited security operatives. Each of the chosen operatives who met Peritus's standards once vetted to BS7858 standards were sourced from within 5 miles of the remote project site.

### Added Value

Ensuring the turbines were delivered to the site required wide modified artic lorries to travel on a 62mile route to the destination. The cumbersome, sectioned components of the 137m high turbines brought with them the challenge of their transportation along country roads which limited the journey time to 10-15miles an hour. Ensuring effective transit required temporary road modifications that ensured safe passage of each component. The transit of the 14 turbines began in March 2016, with the components for one complete turbine taken to site every two weeks.

To support this phase of the project, Peritus sourced and trained several operatives in traffic management. The training permitted their safe involvement to work alongside the convoy on public roads; cordoning and making good any altered sections of roadway as each component approached its destination; notably each 62km

journey required completion within the one working day. It was a requirement for those trained Peritus operatives to work flexibly at short notice, with four traffic management operatives put on a 48hour standby throughout the project, due to the requirement to meet work time regulations; since coordinating the availability of both police and local council employees, to ensure each convoy reached its destination, which had to be achieved within the 8hour working day.



Aires Wind Farm, Turbine Installation

