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Chief Planning Officer
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Dear Sir,

15M COMMUNICATIONS TOWER, 600MM MICROWAVE DISH ANTENNA AND ANCILLARY DEVELOPMENT: CAULDON PRIMARY SUBSTATION, EARLSWAY, CAULDON ST10 3EN NGR: 407703, 349290.

Western Power Distribution (WPD) is the electricity distribution operator for the Midlands and Southwest England, and Wales. It is responsible for a network of over 220,000kms of overhead lines and underground cables and over 185,000 electricity substations. Surf Telecoms is WPD's in-house Ofcom registered Electronic Communications Code Network Operator with GPDO Part 16 permitted development rights. Surf Telecoms is responsible for the provision and maintenance of WPD's control and protection communications network, which link its Castle Donington control centre to its substations throughout the Midlands region.

As is described in detail in the Planning Statement and Supplementary Information included with this prior approval application, a microwave communications link is urgently required to provide WPD's replacement safety control and protection system to the Cauldon Primary Substation. This is to replace the existing BT copper circuits that currently provide communications between this primary substation and WPD's regional control centre at Castle Donington. The existing copper communications network has now gone well beyond its design life and must be replaced, as BT will no longer provide support for this network.

Unfortunately BT's upgraded replacement copper system, under its BT21CN project, which is cloud based BT technology, will no longer meet the split level latency period of 19 milliseconds for circuit breakers to close the electricity supply lines immediately, which is a strict requirement for a safe electricity network protection system. WPD has therefore no choice but to replace the existing copper BT leased lines. It is replacing them with a mixture of underground and overhead fibre optic cables and microwave links that will provide the necessary latency for its future protection system and also permit more sophisticated monitoring and control of its supply network.

Cauldon is just one grid substation in a network covering the whole of the Midlands, where WPD is replacing the existing BT copper circuits with a mixture of fibre and microwave links, to provide its future grid substation protection and communications network, and as is described in detail in the Planning and Supplementary Information

there is no fibre in the area. Therefore the only way the Cauldon Primary Substation can continue to operate safely is via a microwave communications link. This requires the installation of a 15m communications tower at the primary substation, to support a 600mm microwave dish antenna at the required height, to give line-of-sight over intervening trees and topography to Ipstones Edge. At Ipstones Edge WPD has permission to install a 'far-end' microwave dish at 25m AGL on the Arqiva owned TV and radio broadcasting tower in this location. From Ipstones Edge via other existing microwave and fibre optic cables, a secure control and protection communications link with the necessary split level latency can be provided to WPD's control centre at Castle Donington.

WPD and Surf Telecoms are committed to maintaining a positive relationship with all Local Planning Authorities and will be happy to provide any additional information required in relation to this prior approval application.

We look forward to your favourable decision on this most important development.

Yours faithfully

Ian Waterson

Ian Waterson BA (Hons) DMS MRTPI
Town Planning Solutions Ltd
For WPD and Surf Telecoms Ltd