Electricity and bushfire mitigation in WA

Anthony N Baird, Western Power Corporation, Australia

Electricity and bushfires have had an unfortunate relationship in recent years. However the electricity industry in Australia has invested considerable resources in mitigating bushfire ignition from its assets. In Western Australia, which is about the size of Western Europe, Western Power has limited resources to mitigate against bushfire at every point of its extensive network. Therefore the risks to its business and assets from bushfire need to be evaluated in order to implement strategies which best mitigate against this risk. Western Power has developed its own methodology with reference to methodologies used by fire management agencies to assess bushfire risk. The risk reduction strategy flows from the Bushfire Area Risk Assessment. Asset related bushfire risk mitigation activities are initially implemented to secure the network in areas identified as being of extreme and high bushfire risk.

The primary concern of these strategies is to mitigate against ignition from the network assets, plant, equipment or employee action, which may lead to bushfire.

The secondary concern of these strategies is to minimise the impact of asset damage from bushfires, which may occur in the vicinity of network assets.

Short-term strategies are aimed at addressing immediate priority risks. Long-term strategies for revising standards for asset selection, design and planning would enable the implementation of root cause mitigation solutions. Strategies include prioritising maintenance works of key assets in identified extreme and high bushfire areas, innovative design and plant standards to mitigate ignition, partnering key stakeholders to develop a detailed bushfire threat analysis for the whole of Western Australia, review work practices to mitigate bushfire ignition from our workforce, and public education strategies to enhance cooperation with the public to mitigate bushfires.

Development planning and control in fire-prone regions