



Lights out Scenario

Background

This scenario is based on actual events which took place in Lancaster in December 2015. Over the first weekend in December Storm Desmond brought unprecedented flooding to North Lancashire and Cumbria including to parts of central Lancaster. At 10.45pm on Saturday night electricity supplies to 61,000 properties in the city were cut. A flood at an electricity substation resulted in a blackout over the entire city and life for more than 100,000 people reverted to the pre-electronic era. 75 large diesel generators were required to restore supplies and these were brought into the city and connected over the next few days. By Friday, after nearly a week, the situation was back to normal.

Scenario

Imagine that you are affected by widespread and potentially long term loss of power affecting your entire community and the surrounding areas. The power company has been unable to guarantee early reconnection and severe weather conditions continue to make the situation difficult.

The Lancaster experience

It is instructive to learn how widespread the impact of this incident was. Loss of power quickly affected many other services that people take for granted. Most mobile phone coverage was lost within an hour. Although most landline phone services were available many people who had replaced their traditional handsets with cordless phones were unable to connect.

The internet was lost over most of Lancaster and, even where it was available in the street, electricity was not available to supply domestic routers and Wi-Fi hubs. Electronic payment systems were unavailable and most ATM machines did not work. The local TV booster station lost power, which also affected digital radio (DAB) services.

The immediate effects on households were loss of lighting and electrical appliances. Many lost heating too because their gas fired central heating relied on electric control systems and circulating pumps. Many homes have all-electric cooking and thus were unable to prepare hot food. Those in high rise buildings lost power for the lifts and some upper floors lost water supplies.

Shops, schools, petrol stations and other businesses were forced to close. Traffic lights didn't work.