



## the requirement

Sellafield Ltd required a high-integrity building evacuation system (BES) at the company's nuclear processing facility in Cumbria, UK. Sellafield performs tasks involving decommissioning the UK's nuclear legacy as well as fuel recycling, manufacture and waste management.

As a key safety system at a critical national infrastructure site, the equipment is required to be entirely dual redundant and to meet key objectives for a robust architecture, whilst remaining unaffected by environmental and electromagnetic factors as defined by safety standards BS EN 61000-6-4 and BS EN 61000-6-2.

## the solution

ASL's solution was to provide ASL's M400 amplifiers, mounted in a V400 mainframe, which use the company's unique class-D adaptive technology. Due to the critical nature of the site, a 'confidence tone' is broadcast by the **VAR** routers at 15-second intervals, to reassure personnel on site that the evacuation system is functioning correctly.

If third party sensors are activated, either manually or automatically, a distinct warning tone is broadcast within 300 milliseconds - the site is evacuated and 'Keep Out' warning beacons are triggered. Local residents are then automatically contacted by telephone; notifying them of the incident.

The system was also designed to ensure that should any component fail, the operation of the entire system is not affected - ensuring peace of mind.

## the result

Following successful delivery of the system, ASL's V400 amplifier range has become an industry standard - it's exceptionally low consumption allows for compact battery backup power supplies. The system features dual power supplies, routers and standby amplifier modules, with speaker line monitoring carried out via DC surveillance.

