## Playing it safe

The October 2011 arrival of new guidance for the safe operation of steam and hot water boilers gives boiler operators and managers up-to-date advice, and recognised training is a key focus. Brian Tinham reports

uidance on the safe operation of boilers finally caught up with changing technology, with the publication on 25 October this year of 'Guidance on the Safe Operation of Boilers' (BG01). Drafted by CEA (Combustion Engineering Association), SAFed (Safety Assessment Federation) and the HSE, BG01 runs in parallel with the latter's 'Safe management of industrial steam and hot water boilers' (INDG436), which was published on the same day.

BG01 will be more significant than INDG436 for engineers and technicians working with boilers, because it gives very specific advice about how to achieve the aims laid out in the HSE document.

"INDG436 does not give much guidance for a person working at the sharp end," states David Arnold, acting director of the CEA. "It tells you what the regulators want, but not how to do it. Over the past three years, SAFed and the CEA have drawn up a detailed guide to tell boiler operators and managers how to achieve those standards." HSE was also involved and fully endorses BG01.

## Farewell PM5

BG01 replaces the old PM5 and PSG2 guidance notes, from the HSE and SAFed respectively. Rapidly evolving control technology was one of the big drivers for changing the guidance. "PM5 didn't take account of increasing computerisation of boiler controls, so it had to be revised," states Arnold. "Remote access is another good example of how technology has moved on. These days you could, in theory, have someone with a laptop in Welwyn Garden City controlling a boiler plant in Manchester. That was unthinkable when PM5 was drawn up."

So what does the new regime mean for people working with steam and hot water boilers? In terms of equipment, it's the wider range of control options that marks the biggest change. And as far as making sure that technicians are up to scratch, it's the minimum recommended qualifications that come under scrutiny. There are a number of boiler- and steam-related courses available at various levels, but BG01 recommends that operators and managers achieve the national industry standards: Certified Industrial Boiler Operator (CertIBO), for operators, and Diploma in Boiler Plant Operation Management (DipBOM), for managers.

Both of these qualifications are part of the Boiler Operation Accreditation Scheme (BOAS). "BOAS itself is not new," concedes Arnold. "Over 1,000



candidates have already completed BOAS training with Spirax Sarco and other providers."

That is reassuring, and Chris Coleman, training and development engineer at Spirax Sarco (a member of the committee that drafted BG01) adds that BOAS training is not especially onerous. "We offer a four-day BOAS-accredited course for boiler operators and managers that provides the necessary qualifications to cover participants for five years.

"Safety is obviously the main driver, but proper training can also save money for boiler owners and operators. Properly operated steam boilers provide a safe and efficient way of moving energy around. Complying with the new advice will not only improve the safety of boiler operations. Knowing the best way to operate and maintain a steam system is key to improving efficiency, boosting productivity and reducing costs. Any initial outlay will soon be repaid in a typical steam installation."

Incidentally, even though BG01 is guidance, rather than a legal requirement, operating a boiler plant in line with the latest advice is an obvious way to demonstrate to regulators and insurers that you're committed to best practice and have trained personnel. "This guidance is not legally binding, but, if you end up in court and the judge asks if you followed the best available advice, and you didn't, it doesn't look good," warns Arnold. Ultimately, the biggest reward is a safer working environment. Spirax Sarco: safety is key, but proper training also saves money