

The Day After Men

During the night of 13/14th January 2016 every man on the planet died. They did not do so at the same instant, but all died sometime during the night. By the time the women awoke on the morning of the 14th January, civilisation was already over. For the vast majority of them, so would their lives be shortly.

Day 1: 2:00am to 4:00am.

The start of the night shift in the control room at Hinston B nuclear power station, England, was like any other. It was not to stay that way. By 2:00am two of the three desk operators had died where they sat. The lone survivor, Frank McKay, was becoming increasingly concerned. Anyone but a nuclear desk op would have been considerably beyond that stage by now. The ambulance he'd called for when his first colleague died had never arrived. And the calls he'd been making to the emergency services following the collapse of his second colleague were not being answered. Who'd ever heard of 999 not answering? What the f**k was going on? Right now Frank was not even in the control room. This was totally against regs, but he reasoned that if two guys had just died in there then most probably there was something nasty in the air. So he got out. The plant was fine - steady running, no problems.

But Frank's problems didn't end there. He'd obviously tried to alert the shift charge engineer about these sudden deaths. But he wasn't answering either. What? This was the guy in charge. Where the hell was he? So Frank took a walk around the turbine hall. At first he thought there was no one there. Then he spotted a leg dangling from a walkway. Another dead man. Jesus! The air wasn't safe out here either. Frank made a dash for the nearest place he could find a C2 mask. OK it wasn't designed against chemical attack but the filter contained activated charcoal so it was better than nothing.

Slightly reassured about his own safety, though not much, Frank continued his search. More bodies - including the shift charge. Holy crap. Was he on his own here? (The answer was yes, but Frank was never to know that for sure).

He started 'phoning around everyone he could think of, starting with the Station Director and then trying pretty much every member of station staff he could think of. No answer. So he tried the company CEO, Susan Hastings. Finally, after letting the damn thing ring forever, she answered. He had a great deal of trouble convincing her he was not a hoaxer. Having absorbed the situation, she promised Frank she'd make sure he got back-up immediately. He didn't. One presumes she had become distracted by something else. Possibly by the corpse she'd just discovered in the bed next to her. Or possibly by the fact that she couldn't raise anyone to help either.

So, Frank, what to do? Well it was no safer out here than in the control room, so back he went. Having just one operator left on duty was unacceptable. Having dead bodies liberally scattered around the plant wasn't too hot either. At least the plant was behaving itself. What to do? He waited half an hour, then he 'phoned the CEO again. No answer.

By 3:30 Frank had had enough. Years of training meant that he knew absolutely clearly what his No.1 duty was at all times - make sure the plant is safe. He had already stretched the operating rules by allowing the reactors to continue at power

with inadequate staff on site. He debated whether to attempt a controlled shutdown. He'd never had to do one on his own before. On the other hand the plant had handled any number of automatic trips successfully before now. After a quick call to grid control to warn them the station was going down, Frank lifted the covers off both reactor trip buttons. Momentarily his hand hovered over them - then he pressed decisively. The reactor trips initiated and the plant would now obey the dictates of the automatic shutdown sequencing equipment. And not a moment too soon. Frank slid off his chair, never to move again.

A similar scenario was played out in other nuclear power stations in the UK, just slightly later. A minor variation was at Torsham Bay in that one of the ops night shift was a woman. Her night was pretty much a repeat of Frank's - except she didn't die. She buttoned the reactor just a few minutes after Frank. Grid control tried to argue her out of the double reactor trip, but she knew where her duty lay: the operating rules were clear. Hey, she thought, they can cope well enough with one station going down. She didn't know about Hinston B tripping just a few minutes earlier.

Half an hour or so later a third nuclear Station also 'phoned grid control to warn them they were about to trip. Grid's response was, shall we say, unprofessional. It had been a similar scenario at the latest nuke to go down - except that all the ops staff were already dead and it was the shift charge himself about to button the reactor. It was a no-brainer: no operators means no operation. Minutes after that a fourth nuke was tripped.

Those who had survived so far at the remaining nukes did not get to the point of a manual trip. Many had decided to do what the night shift often decide to do - to hang on until the morning shift started and hand the whole problem over to them. But in the event all UK reactors auto-tripped on loss of grid when the whole grid system crashed shortly after 4:00 am.

At grid control everything had been hunky-dory until 3:30 - apart from Bill Boothby dropping dead, that is. Followed later by all the men. Feasibly the three women on the grid control roster that night could have coped without their male colleagues - maybe. But not with so many back-up stations being unresponsive they couldn't. The next half hour would be their worst nightmare, the night from hell. They would never have one like it again. There would be no mains electricity in the UK ever again.

The loss of 5 GW of input to the grid in the space of little more than half an hour was way beyond the worst design basis fault scenario. In fact even the loss of only the first two nuclear stations, just a few minutes apart, was a serious challenge. This drove the supply frequency down to 49 Hz. With no further generator losses the system would have coped, stabilising as fast acting pumped storage stations and open-cycle gas turbines kicked in to make up the loss of the initial two nukes.

But a whole cluster of small embedded generators now crashed out. Some were correctly responding to excessive rate-of-change of frequency, acting in self-preservation mode. Others tripped on low frequency, though 49 Hz was not really low enough for that. They should really have kept going down to 47 Hz but it was well known that some of these small generators had out of date control software that was mis-set. So another 0.4 GW or so of input to the grid was lost. Small beer, but unfortunately all the rapid response generators were already running in response to the loss of the nukes. There was no quick-acting substitute for this latest loss of generation. So the frequency dropped below the magic 48.8 Hz at which distribution

network operators were obliged to enact compulsory demand control. That means selectively cutting off power to parts of the system to reduce the un-meetable demand. But that would not normally have been a disaster - just a minor inconvenience to a percentage of the population. And even they might have experienced a power cut for only half an hour or so until other generating units could be brought on line.

What happens is this. When the frequency drops below 48.8 Hz, low frequency relays automatically trip - taking out around 5% of demand. Or at least it should be 5%. About half these relays generally fail to function. This has been known since 2008. They really did mean to get around to fixing those relays. Anyhow, some load gets shed automatically, though perhaps not as much as it should. If this is sufficient to stabilise the rest of the system, then fine. And it would have been if there had been no further losses - and assuming other generators had been brought in before the pumped storage stations ran out of water. This would have been a reasonable expectation on a good day.

But then the third nuke went down.

The only way the system could now avoid a total systemic shutdown would be for the distribution network operators to implement power cuts manually to more areas - and very rapidly. The key thing here is the word "manually". The extent to which demand disconnections could be achieved by automatic systems had already been exhausted by this stage. The problem was that by this time less than half the staff at both grid control and the distribution network controls were still alive - virtually just the female staff. It is doubtful that a crisis of this magnitude could have been managed so as to avoid a total crash even with a full complement of staff. With fewer than half the staff remaining - and no surviving staff at all at some locations - there was no chance. In fact, even with a full complement of staff at grid control and the network centres, the system was becoming screwed by the unresponsiveness of the potential replacement generators. The rapidly diminishing number of surviving operators at CCGT and coal-fired plants meant that it was becoming increasingly difficult for grid control to get replacement generation running. The irony is that there were plenty of them. The installed CCGTs alone could have replaced the lost nukes twice over. But it wasn't a question of capacity. It was a question of time and staff. Unscheduled run-ups rely on manual intervention.

Everywhere around the country dead men were failing to do their duty.

Women had never figured strongly amongst the shift-working ops staff. And the few there were had understandably become overwhelmed by the situation. You can't run a power station single-handed whatever your genitalia.

Then the fourth nuke went down.

And then the French declared the channel interconnector unavailable. They were having their own problems.

Then everything went dark.

Day 1

By the time the women awoke on the morning of 14th January civilisation had already ended. They just didn't know it yet.

Very few women who were married or had live-in male partners even considered going into work that morning. They were more concerned with the corpse next to

them in the bed. Admittedly some women would have gone off to work oblivious of the fact that said corpse was indeed, literally, a corpse - as opposed to the metaphorical corpse that they might be used to. But the power cut, and the resulting darkness that still prevailed on an English January morning, caused much cussing and banging about. And the corpse needed to be revived to be asked such questions as "where are the candles", and "get down there and check the circuit breaker", etc, etc.

(We'll draw a veil over the matter of sons. Let's not have too much reality here).

Where the heck was everyone when you needed them? No answer from any undertakers / funeral parlours. No answer from the doctors' surgeries. Yes, some of the staff there were women, but they were at home trying to deal with corpses too on the whole. No answer from the police. Yes, there were women cops, but those who weren't dealing with bodies and had actually turned up at work had pulled the plug out of the 'phone. What the hell could *they* do in this mayhem?

The new reality which greeted the distraught and bewildered women was this. Everything requiring mains electricity was now useless. Recovery of the electricity grid from a complete system crash would always have been a very tricky business. The system would need to be picked up little by little, with all controllers and stations' staff in position and carefully coordinated. This would require excellent comms and a full complement of experienced staff - and still be tricky. But the number of people, i.e., women, left who had any idea of what was needed was far too small to accomplish this difficult task. Moreover, to be possible at all required good comms - and, as we shall see, this would remain possible only for a rapidly expiring period of time. The grid would never be up again.

The women could forget the TV and the mains powered radio to find out what hell was going on.

The good news, though, was that some 'phones were still working - for a while. Most women found that their cell phones were working, but not everyone. The base station towers were mains powered too, but they invariably had a battery-based back-up which switched in automatically. With so many towers around the country these batteries were not maintained the way they should be. So some turned out to be dead and locals on that cell network were out of luck. But most base stations still operated. The bad news was that this battery back-up would last just 3 or 4 hours. By 11 o'clock all the mobile phones in the land were so much useless junk.

Cordless land lines were no good either. Their base units were mains powered. But good old fashioned land lines with a hard-wired connection were working fine - though many people no longer had one. Land line phones need no local power. Their tiny power needs are supplied by the telephone company from their end of the business. Of course the phone company would normal use the mains too. But they all had substantial battery-backed UPSs and back-up diesel generators which kicked in automatically. Good old British Telecom - their phone system would continue to work fine with no human intervention whatsoever - until the diesel ran out in 4 days time.

And what about the internet? The good news was most of it was up - if you could connect. All the major data centres and service providers had substantial UPS and diesel back-up arrangements. Some diesels failed to start on demand. Ordinarily a quick manual reset would have had them going in no time - but technicians to carry out such duties there were none. Most, though, started automatically and the internet was largely functional. But how to connect to it?

Well mains powered PCs were no use, obviously. If you had a charged mobile then you had the internet via the cell network - until 11 o'clock, that is. After that, even if you had charge in your mobile or tablet or laptop, your home wireless connection was out. And it would do no good to run a lead into the router - the router is mains powered - sorry. A few people still had old dial-up modems, which would have worked nicely, hard-wired into the land line. But PCs with dial-up modems were pretty much all mains powered. A few people managed to find ancient knee-crushing laptops with dial-up modems - but were they charged? No, of course not. So the fine work of the data centres in remaining operational was pointless for the vast majority of people after 11 o'clock. And the data centres would only remain up whilst their diesel lasted - 4 days maybe.

In the world of broadcasting, the big players had good back-up supplies. I say "good" but the BBC's back-up power supplies had been known to fail on several previous occasions. This time, though, fair dos - Broadcasting House barely noticed the problem - except, of course, for half their staff being AWOL and being in a state of total disarray. Nevertheless, emergency broadcasts were sent out by shell-shocked women rising to the occasion, though with many a technical glitch due to the shortage of technicians - and with little in the way of a script. But almost no one was watching or listening after 11 o'clock. How could they? Before 11 o'clock many people tuned in via the cell network internet connection. After 11 o'clock a comms black out descended on almost everyone.

In the few hours that there were any comms, at least it became generally known that apparently all men had died.

Up and down the land the reaction of women was predominantly anger. What were men thinking of, going dying on them? Selfish bastards! Why didn't they make all this technology more secure? Why, for heavens sake, did they not try a bit harder to make themselves redundant? It was, without doubt, the ultimate example of women being victimised.

Week 1

A few people had some power. Some had solar photovoltaics on their roof. But this was an overcast January day in the UK. There was barely enough juice to power one or two light bulbs. Some managed to get a PC working, to a degree, but with constant crashing due to the instability of the supply. The luckiest people were those out in the country who had their own diesel generators. These were the only people who managed to follow everything that was being pushed out by the broadcasters or on the internet. But this lasted only until diesel tanks ran dry - be it their own or those of the BBC or the data centres. True, the military had their own emergency systems that could, in principle, have been pressed into service. But the handful of women who knew about this system were not enough to fire it up. And in any case it would, like everything else, have lasted only as long as the fuel. By the end of day 4 it was all over. Total comms black out for everyone. For most of the women this had been the case since 11 o'clock on day 1.

So word of mouth took over as the only means of communication. And for anyone not close by, this meant jumping in the car and driving. Traffic lights weren't working, but that was no big problem. There were crashes, of course, and many cross-roads had abandoned vehicles restricting free flow of traffic. But then there were far fewer cars around so that was not a major difficulty. Many, many women over the first few days

drove to see if their mother, daughter or sister were OK. Otherwise, how were they to know? Sometimes this involved long distances. Many ended up stranded in the middle of nowhere before discovering that no fuel was available at gas stations.

Industrial action by tanker drivers in the past had taught the UK population just how quickly the petrol and diesel ran out if there were no deliveries to the gas stations. Panic buying meant that after the first day - or even half a day - you were out of luck. And by the end of a week, most people had used what they had in their tanks. But the situation that the women found themselves in now was worse. There was no fuel to be had at the gas stations at all - right from 4:00 am on day 1. Oh, there was fuel there all right. But the pumps were electric.

Now what needed doing was to grab a diesel generator from somewhere and rig it up at a gas station to pump the stuff out of the underground tanks. But few people thought ahead - to be fair they had a lot on their minds. So by the time they thought of using a generator at the gas stations the diesel tanks of most generators (of which there were very few) were already dry. And even if you found one with some fuel left, you'd also need a vehicle with fuel to transport it to the gas station. Mostly they screwed up. But in some places, though, the women did get their act together and did pump out the underground fuel.

Possession of a gas station together with a working power supply rapidly became a mark of status amongst the gangs which arose spontaneously in the second half of the first week.

Women did realise eventually that there would be large quantities of fuel at the refineries. Some enterprising women did retrieve some. But this was restricted to tankers which happened to be full but not delivered - invariably containing a dead man at the wheel. Whilst there were large quantities of fuel in tanks at the refineries, the women could not figure out how to access it without electrical power. The refineries themselves had stopped production almost immediately upon loss of electrical supplies, or due to the absence of essential manual actions.

Fuel became like gold. That meant that any women who had conserved the fuel in their vehicle found it hard to hang onto. Neither locked garages nor locked petrol caps were any deterrent now that all law and order was a thing of the past. So the vast majority of women had no transport after about the first week. No transport and no remote communication.

Domestic gas supplies (methane) continued uninterrupted well into the second week - before stopping abruptly. Production of gas had stopped virtually immediately, either due to automatic tripping on loss of electrical supplies or due to essential manual operations which never came. This applied equally to North Sea gas as to the interconnectors from Belgium, Norway and the Netherlands. There was some on-shore gas storage, so gas would continue to be delivered for some time. But no one could get any gas unless the gas network compressors remained operational. A few were electrically driven and dropped out immediately. But most compressors were driven by gas turbines and continued to function - a lovely self-sufficient system in which the gas pumped itself - so long as stocks lasted.

UK on-shore gas storage had long been criticised as inadequate. Fully stocked and with average demand there was a mere 20 days supply. But in past winters stocks had dropped below 2 days at times. It was little better this winter and by mid January there was perhaps 5 days on-shore reserves at the high rates of usage normal during cold

weather. But this was academic to people reliant on central heating. Gas boilers would not run without electrical power, and nor would radiators get any hot water without juice to drive the pumps. Because these people couldn't use their share of gas, what gas there was lasted a bit longer, around 10 days. Those who had gas fires or gas stoves were lucky. They could stay warm. If you had only gas central heating and all-electric cooking facilities you were out of luck immediately. Cold house and cold food from the first morning. If you had gas appliances that worked, you continued to burn gas. No one thought of rationing it. If you didn't use it, others would. It would run out just the same. So, those with gas hobs or cookers could continue to stay warm and have hot food too - for 10 days.

During the first few hours shopping continued oddly as before. The women still used cash or chip & pin. But their cards functioned only so long as the cell network was up - and assuming your bank's data centre was one of those with successful back-up supplies. By 11 o'clock on the first day all plastic money was a thing of the past. By day 2 many women had realised that all money was a thing of the past. By day 3 they all had. No one was coming to arrest you whatever you did. And besides, cash had run out because there was no way of getting cash anymore.

Decent women held back from looting. All this meant was that decent women lost out. By the time they realised they should grab their share, it had mostly gone. Many women used up their car's fuel in raiding as many shops as they could. Not a bad strategy: you can't drink petrol. But incredibly this looting included taking many fashion items with little practical utility. Many women were slow to fully grasp the reality of their predicament.

By the end of day 4 there was no food or drink left in any shops.

No one was seriously hungry yet. But some would be very shortly. No one was seriously thirsty yet. But most would be shortly.

It is remarkable how many women were totally unaware that the daily miracle of water appearing out of their household taps required electricity. Water started off in reservoirs or in underground aquifers. The main thing about these sources of water is that they are low down: almost certainly at a lower elevation than your house. It's a gravity thing. So, to get water to your house it has to be pumped. And the pumps in the pumping stations are electric, mains powered. So all water pumping stopped immediately at 4:00 am on day 1.

But that did not mean that domestic water stopped flowing straight away. Some people's supply was fed from a local water tower. Their supply would last until the tower was dry. In fact most people had some similar measure of 'capacitance' in the system, though not necessarily very much. And in most homes there was a cold water tank in the loft. So even when the mains supply pressure dropped to nothing, you would still have a very large tank of fresh water. If this was used only for drinking and cooking, and very sparingly for essential cleaning, e.g., of cooking utensils, this tank of water could last for a very long time. **If.**

Unfortunately most women did not appreciate the crucial distinction between the rising mains water supply and the descending header tank supply - until they'd used it all.

Many women were put off continuing to have showers by the fact that there was no longer any hot water. This was a good thing because it helped preserve the water a little longer. But, incredibly, they continued to literally throw water away by flushing

the toilet. Even when the mains stopped flowing, they'd fill a bucket from the precious cold tank and throw it down the WC. Enough drinking water to have lasted some days in one go. In time to come they would curse themselves for this.

It took several days for the smell to start - delayed by the coldness of the weather. The corpses were thought to be to blame. They were mostly still there, in the houses. Now there was a flurry of neighbour helping neighbour to bury the offending object in the nearest convenient place. They wept as their hands blistered, hacking at the frozen ground. There were few back yards without a body by the end of the first week. But the smell continued. More earth was heaped upon the makeshift graves, which were none too deep. The smell got worse. Then they realised.

The sewers were backing up. In some houses the toilet would no longer take anything away. But even if the toilet appeared to be working, the stuff wasn't going far. Sewage is pumped too, don't you know? No electricity means you don't get the nasties taken away. Nope. They may go a little way - so far as gravity permits. Then the turds hang around waiting for the magic of electrictrickery to disappear them to oblivion. But not any more. Time you started squatting in your back yard, ladies, and don't forget to bury it.

Once again women in rural homes were better off. With luck they might have a full tank of propane to keep them warm for some months. They would also most likely have a septic tank, so sewage was no problem to them either. And if they had a diesel generator then they were truly in clover - until the diesel ran out. Of course, country people are even more reliant on transport, but some would have their own red diesel tanks for their farm machinery. And whilst they usually bought their food in shops in town, they also had the option of eating their own produce. Without doubt, the countryside was the place to be. And some small holdings had been run by women alone anyway. If any human society was going to survive, this is where it was going to be. The towns and cities were finished.

Month 1

By the end of the second week women were raiding their neighbours homes because they believed they had grabbed too much stuff - and they wanted it. No, they *needed* it - they were hungry. Whether you ate or not now depended upon the strength of your raiding party. Gangs spontaneously arose in an atmosphere of enforced cooperative self interest. Larger gangs oppressed and stole from smaller gangs. Food, drink and fuel were what they were after.

By week four you would be stabbed to death for a packet of biscuits or a can of coke. Many women remained true to their non-violent nature. They would die first.

Being nice and cooperative had evolved in more settled times. Under the new conditions this was no longer a good survival strategy.

The majority of women went through a period of having nothing, having either consumed what they had or having had it taken from them. These women either died through want, or through suicide, or joined one of the gangs. Mostly the gangs did not take too many extra members. It was just more mouths to feed, and they protected their finite resources jealously. But they also needed a big enough army to raid other gang's supplies, and to protect their own from being raided. Strategies differed. But gangs which remained too small tended to get snuffed out. The optimal strategy was to minimise members but maximise aggression. In other words, it was the really nasty women who lasted longest in the cities.

Having quickly emptied the shops, the gangs realised that the big prize would be to take and hold a major supermarket distribution warehouse. This they did, but they quickly discovered their limitations as militarists when faced with having to defend a large area against attack. These places became the scene of wholesale slaughter. Wives and girlfriends of former drug dealing men were prominent - they tended to have the guns. The most successful gangs would do deals - food in exchange for fuel, or whatever it might be. With the enormous volume of products stored in warehouses, a small number of gang members might survive for many years - but with the prospect of a diet consisting, perhaps, of only baked beans, tinned tuna and evaporated milk. The real prize was drink. Any drink.

As the lower socioeconomic strata consolidated into gangs in the cities, the middle class women realised that there was no long term option here at all. Water was to be had where it naturally went - into rivers, lakes and reservoirs. There was no long term future in industry-produced food, but food was to be had where it grew or was reared. The middle class women became refugees in their own land - migrating into the countryside. They had to walk, of course, but distances in the UK are not too great. But it did mean that they could take very little with them. In the winter weather this was (wisely) largely confined to warm clothing, waterproofs and tents.

Reactions to the invasion of the rural communities by the townies was mixed. The most common reaction was to attempt to repel the refugees by force. This was partly because the country women knew that their own resources would not stretch very far - and a tough mind was going to be essential if anyone was to survive. But it also owed a great deal to the traditional snobbery between town and country. Unlike the situation in many states, in which city dwellers looked down on country folk, the tradition was largely reversed in England. The long association of land ownership with the landed gentry meant that the "country set" were not inclined to allow the oiks to trespass on their land - especially now. And, of course, the rural folk were well endowed with shot guns. I regret to say there was wholesale slaughter - on a scale not seen in the English countryside since the civil war - and for the first time the dead and the killers were women.

But this reaction was not universal. There were a few places where the number of refugees was small enough to be absorbed into the existing communities of women survivors and were allowed to join with them, working cooperatively. Even here though, it was occasionally necessary to see off undesirables. Killing was no longer regarded with the disapprobation it once was. Desperate bands of marauding bandits were to be eradicated as quickly as possible.

Water was the thing. There was no long term future unless your homestead was close to water.

Year 1 and After

The number of women still living in the cities reduced with staggering speed, mostly through death. A few die-hards hung on for years, but only very few. All towns and cities were ghost towns.

Over the first months, small communities of surviving women became established organically in isolated pockets around the countryside. Many found that they had to move from where they initially settled in order to be close to water. As long as one's previous "civilised" standards were relaxed sufficiently, that was not generally a problem in many parts of England. The lives of these women became, in many ways,

medieval. However, by the standards of medieval times they were fantastically rich - initially. A dozen or so women frequently commanded an enormous flock of sheep and a herd of cattle of which a medieval lordling would have been proud - not to mention many dozens of hectares of crops.

Looking after such large stocks of animals, and harvesting the crops, would, however, become impossible. When the diesel ran out, all farm mechanisation came to an end. Farming truly was back to the medieval - but now without the men to do the donkey work. Most of the crops that first year rotted where they lay - as people in the cities starved.

So, the "great wealth" of these small country communities was a transient phenomenon. The wisest women planned realistically for the following year. It would be necessary to plant the right crops. Having many tonnes of rape seed was not of much use. Nor was a vast harvest of sugar beet. Instead they needed to concentrate upon wheat and potatoes, and upon carrots and cabbage - in quantities which would be enough to survive, but not more than they could manage to harvest and store over winter. This was not as easy as it may sound. From where was the seed stock to come? So it was that much of the precious remaining supply of diesel was used up in travelling to obtain seed, an absolutely necessary activity which stymied the ambitions of many of these would-be agricultural survivors.

Even for those women as coped over the first spring and summer, as they faced the beginning of the following winter they knew that, hard though life had been that year, it was certain to be much harder next year - and harder still the year after that. Nevertheless, many of these small communities of women survived. But, unless one of their number happened to have been pregnant when the men died, they knew that they were a doomed community and that fact undermined their psychology fatally, so the suicide rate remained high.

Pregnant women were now regarded with awe. The future of the human race lay in their wombs. Only too late did most women think of sperm banks. The refrigeration in the sperm banks had failed almost immediately. And in the first few days, whilst the sperm still remained viable, it is fair to say that virtually all women had more pressing things on their minds than artificial insemination. In most cases, therefore, the sperm died before anyone had realised its irreplaceability. It is believed that in the whole of the UK only 17 women realised in time and attempted to inseminate themselves. Of these 7 became pregnant, but four of these women did not survive to give birth. Of the remaining three, one child was still born and the other two were both girls.

The condition in other countries was unknown in the UK. No doubt it played out in similar fashion in all the developed nations. More primitive societies were less dramatically affected as a consequence of being less reliant on technology in general and energy in particular. By year 2 there was little difference in terms of standard of living or hardship of life between an African country and England or the USA. Boy children had been born, albeit all too few, and a great weight of expectation would fall upon them as they grew. In a small rural community in Yorkshire, the women were burning the last of the books - the only fuel they had left to hand, trying to keep warm and healthy the only boy baby their community had produced. As the flames licked around the last book one could just make out its title: *Are Men Obsolete?*