



## ESKOM DEBACLE: HEALTH CARE RISKS, FRUSTRATIONS CLIMB



A full moon dimly outlines the mighty Tugela River upstream of the Church of Scotland district Hospital in deep rural KwaZulu-Natal – suggesting creative new sources of power to offset seven years of expected power outages.

Picture: Chris Bateman.

Little or no warning of power outages this January left already anaesthetised patients awakening to rescheduled operations, surgery lists scrapped, ICU and trauma patients being manually ventilated, staff restive and medical costs accelerating.

Surgeons and physicians were fuming as their lives and those of their patients were turned upside down, the latter often threatened, although no patient deaths were reported at the time of writing. Like mine managers losing tens of millions of rands daily as the crisis constricted the lifeblood of South Africa's economy, they cited unpredictability, not the actual power shortage, as the reason for halting

operations. Hospitals refused to run elective surgery lists because of inaccurate power outage schedules and sudden blackouts or 'dips' that daily put them at the mercy of back-up generator systems and attendant power delays, creating unacceptable risks.

***'It was at the worst possible moment. We had the sheath half off the stent and found ourselves "blind" because the X-ray machine was rebooting and we couldn't see what we were doing.'***

Said Kurt Worrall-Clare, CEO of the Hospitals Association of South

Africa (HASA), 'Unless we have 100% accurate, reliable information on power shedding so that plan B, C and D can kick into place, it's just not worth the risk. The few seconds it takes for a generator to kick in during cardiac surgery can be critical.'

His assertion was dramatically illustrated when power failed while Sandton cardiovascular surgeon Farrel Hellig was carefully releasing a stent in the carotid artery of a 69-year-old patient in a Netcare Sunninghill Hospital theatre in mid-January.

Back-up generators kicked in immediately, but X-ray equipment vital to the operation timed out – taking 10 minutes to reboot. 'It was at the worst



possible moment. We had the sheath half off the stent and found ourselves "blind" because the X-ray machine was rebooting and we couldn't see what we were doing,' he told *Izindaba*.

Hellig, who is vice-chairperson of the South African Society of Cardiovascular Intervention, explained, 'Once you've dilated the balloon, you can't really bail because the basket protection device to catch debris must first be removed'.

'Theoretically anything could have happened. We would not have been able to deal with the complications because we couldn't see what was going on,' he stressed. They chose to leave the equipment exactly where it was until the X-ray view returned. The team then calmly and successfully completed the procedure.

Hellig said he received warning of the impending power outage only when he and his team were 'at the point of no return' during the hour-long procedure and confirmed that no surgery at his hospital was ever begun on back-up power. The implications of this included working after hours and on weekends to try to make up backlogs. He had stopped consulting altogether.

### Overworked staff stretched further

This means Eskom's incapacity is also exhausting already stretched health care workers, with concomitant risks to the patient. Hellig felt it was 'just a matter of time' before the first patient died. However, his hospital was 'trying to resolve things with Eskom and I must say there've been less power outages since'.

Sunninghill's tally of blackouts over a fortnight in January totalled 124 hours (2 outages lasting 2 hours each, daily). A colleague at the hospital, interventional radiologist Farrell Spiro, also had a procedure interrupted by the power cut and 'had to stop because it was just too dangerous'. Spiro said he phoned Eskom daily to check on planned cuts. However,

when he called on this particular day, nobody answered and then the phone was picked up and put down. Spiro said Eskom didn't always keep to its schedule, which made it difficult, if not impossible, for doctors to plan.

The hospital houses a world-renowned cardiac unit for children, which takes referrals of extremely ill youngsters from around the country and from other African countries. The doctors said the power cuts were putting ill children undergoing procedures at risk. Power 'dips' were an equally frequent occurrence, often with consequences just as serious as when equipment is switched off, and staff were unable to monitor patients until computers and other machines turned on again.

***'We're working late into the night and at weekends to make up operating time and it's basically impossible to consult.'***

Both cuts and dips were happening daily, sometimes several times, for weeks on end in mid- to late January in areas of Gauteng which are home to half a dozen hospitals.

Paul Crooke, a vascular surgeon at the nearby Olivedale Hospital, said 'great anxiety' prevailed because all life-support systems were being forced to rely on generators. 'It could be absolutely catastrophic,' he said, adding that it was 'time the government excluded hospitals from this, we are emergency services after all'.

He said doctors were enormously frustrated. 'We're working late into the night and at weekends to make up operating time and it's basically impossible to consult.'

Elaine Rix, Olivedale's marketing manager, said that on 24 January they first lost power at 08h00 for 40 minutes and then again from noon until 15h45. 'All our theatre cases (60 of them) obviously had to be rescheduled. We have huge generators

(they purchased a second one late last year) that keep the hospital going but you can't do elective surgery on that. Doctors and patients get very upset. I was visiting GPs in our area that day and got to chat to them at length in near darkness – I'm talking Fourways, Randburg, Northcliff, Honeydew ... all in darkness. You drive around and the robots are out. People get impatient and jump them,' she added. Rix said the Olivedale generators were only for the hospital block. The administrative block 'basically shuts down', causing frustration and inconvenience for staff and patients. 'Doctors call us and say what's going on. We say it's out of our hands, so they basically have to finish whatever they're doing as soon as possible, whether it's heart surgery or hernia, depending on where they are. They can basically close the patient and wait. Of course if it's a trauma patient whose life is in danger, they go on.'

### Back-up failure

Nurses at Helen Joseph Hospital manually ventilated patients in the ICU for nearly 40 minutes during one January electricity blackout. The hospital's generators had kicked in immediately but when the power came back on, a fault in the hospital's power supply led to the blackout.

Eight patients in the ICU had to be manually ventilated, forcing re-allocation of scarce nursing staff with serious knock-on effects for overall care, something Worrall-Clare described as a serious aggravating factor everywhere. This kind of technical 'back-up' glitch is common and a major reason why hospitals need accurate blackout information.

If the outages continue apace, the health care sector could also soon face a shortage of vital liquid oxygen. The high electricity consumption plants required to manufacture it can suffer component damage plus a critical 'down time' of 5 hours for every blackout. Brian Cummins, regional manager of Liquide Air, Western Cape,



explained that 'even a 10 second outage means a minimum of 5 hours in lost production (for rebooting). Ultimately, if these cuts continue and we can't produce there'll be a crisis,' he warned. Liquide Air has a 30% share of the market in South Africa. Its competitors use identical machinery.

Cummins appealed to Dr Wayne Smith, Deputy Director of Emergency Rescue Services in the Western Cape, to intervene with Cape Town's municipal power managers, 'but it seems we're on a wider grid and that would draw too much for us to be an exception'.

Smith, who is co-ordinating the province's Fifa World Cup disaster management plans, expressed concern at the potential for increased trauma with traffic lights down and people injuring themselves during blackouts. However, he said accident statistics had remained at usual levels for January.

From an emergency medical services perspective, EMS Western Cape had

purchased a 'whole lot' of portable generators and multi-power source incubators, monitoring equipment and defibrillators.

Smith said his foremost consideration was building multidisciplinary teams with optimal communications systems. 'We've got to set up 24/7 contacts and have a sound system in place to deal with any crisis,' he stressed.

*If the outages continue apace, the health care sector could also soon face a shortage of vital liquid oxygen.*

Worrall-Clare said other blackout-related hospital problems included higher patient co-payments when patients had to be transferred out of a hospital with which their medical aid was contracted, rising staff costs (overtime and technical call-outs) and ambulance delays due to increased traffic congestion.

'Unlike a power switch, health care doesn't switch on and off. People don't get sick conveniently,' he added.

The Medi-Clinic Group said it has spent R25 million on emergency generators this year, on top of R12 million it spent on back-up generators last year. The group lost the equivalent of 60 days of power at its 51 hospitals during January.

Meanwhile Eskom confirmed receiving claims in late January totalling at least R400 000 from irate electricity consumers seeking damages. Cosatu is preparing a class action suit to ensure workers are compensated for losses. An Eskom spokesman said he expected the claims figure to rise 'considerably' in the near future. The parastatal has assembled a panel of lawyers to handle cases.

Eskom bosses say South Africans must prepare for 7 years of power cuts.

**Chris Bateman**

*is medical schemes' service leaving you feeling sour?*

*medihelp offers the sweetest service in the industry\**

\* orange index 2007  
Ask Afrika

**medihelp**  
medical scheme  
authorised financial services provider

086 0100 678 [www.medihelp.co.za](http://www.medihelp.co.za)

better service • better value • better care

173