

HEALTHCARE

## Planning for failure

How robust  
is your power  
contingency plan?



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# Foreword

For householders a power blackout is an irritation. But for an organisation, be they public or private sector, it can be at best extremely costly, or at worst catastrophic.

In the last year alone, Southampton's General and Princess Anne hospitals were forced to cancel operations due to an electrical fire. Ipswich Hospital suffered power cuts after a circuit breaker failure, impacting outpatients, X-rays, scans and pathology. The list goes on.

Very often the cause of the power cut is beyond the organisation's direct control. Lightning strikes, vehicle accidents, equipment fault, flooding and vandalism, can all result in blackouts that leave hospitals faced with the prospect of making appointment cancellations.

Ageing equipment can also be a disruptor. If temperature control equipment fails, it has the potential to impact surgery. While the majority of downtime we see is down to energy, there has been a rise in temperature control equipment failure which is significantly impacting operations.

However, what organisations can do is plan for failure and have a robust contingency plan in place that helps provide extra stability to your operations. Ultimately, this gives patients peace of mind, that if the worst was to happen, you have a plan in place that can fix the problem without too much impact.

While hospitals will likely have stringent contingency plans in place, due to the critical nature of the working environment, recent headlines show that the problem could lie in the infrastructure or cabling.

Ipswich Hospital provided a stark reminder that if there is a fault with the circuits, then the back-up power will simply fail. If the back-up power in place doesn't work, questions will be asked and negative headlines will likely follow.

We hope this report helps emphasise the importance of contingency plans. If you have any questions, please don't hesitate to get in touch with me and we can discuss your individual concerns and thoughts.



**Chris Rason**  
Managing Director  
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# The scale of the problem in numbers

There is a plethora of statistics available which demonstrate the scale of the issue downtime causes across the UK.

In a recent survey of 200 UK energy decision makers, Aggreko found that 82 percent of UK businesses describe power continuity as a major or significant concern. This is clearly encouraging, as it shows an awareness of the potential impact downtime can have.

However, slightly more concerning is the fact that of those Aggreko surveyed, one quarter do not have a power continuity plan in place.

Complacency is clearly a worrying trend among UK industry, where the cost of failure is only taken into consideration after an outage has occurred.

Downtime, whether caused by power or equipment failure, has a large impact on the healthcare industry. It can result in appointments being cancelled and frustrated patients, ultimately leading to reputational damage that can take months to repair.

Reputational management is also a prime concern in healthcare. The UK suffered its largest power outage in a decade, leaving Ipswich Hospital without power for one third of its building for a short period of time. The headlines that proceeded indicated panic and a lack of trust if the situation would be repeated.

## **Can your facility really afford this damage?**

Another cause for disruption is freak weather. Incidents such as floods, fires, and extreme heat are growing. And as forecasters expect the UK and Europe to continue experiencing further extreme heatwaves, organisations must act now in order to prepare for overheating and system failure.

Making the decision to implement a contingency plan has never been more important. With so much to consider, it is recommended that a professional site survey is undertaken. The rest of this paper delves into the requirements, what you should be looking for and reiterates the benefits to your organisation.



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# Site surveys

## Should you have a contingency plan in place?

Contingency plans are an absolute necessity in order to mitigate risk. As the economic climate continues to remain unclear, failing to have a plan in place should the power fail, or there be a problem with a boiler or air conditioning, could lead to X-rays being cancelled and surgeries rescheduled.

Organisations simply cannot afford to take the gamble.

Contrary to belief, the most common contingency plan call-outs we see is through equipment failure, rather than a blackout. If any owned equipment fails, it is the responsibility of the organisation to replace it. Sourcing a replacement item, and finding the budget to fund it, can be timely. And in these situations, time really does cost money.

As hospitals halt, appointments cannot be met. And if appointments are cancelled, reputation is damaged.

You will understand the risks associated with not having an adequate contingency plan. But where do you start when it comes to implementing a plan? And how do you know you have covered all possible risk?

Given the intricacies of equipment, having a trained eye to spot the signs of potential fault is critical. This is why the site survey plays a crucial role.

## Technical site survey

The process of implementing a contingency plan all starts with a technical site survey. This truly delves into what your organisation really needs in order to plan for failure.

Technical site surveys go beyond simply looking at what equipment is required. It considers the infrastructure of the building, the logistics of delivering replacement power or equipment, and also what modifications are required should the worst happen.

The survey is of paramount importance. Without it, you could call for back-up power or equipment and have the wrong cables or the roads could be too narrow to fit a certain sized vehicle.

Essentially, it provides an overarching view of the considerations you need to consider from trained engineers. Identifying potential points of failure, the surveys importantly establish the changes required to prevent equipment downtime. It ensures your business is fully prepared if a power failure was to occur, which is priceless.

# Contingency plans – what to think about

We have emphasised the importance of having a contingency plan in your facility. The difficult part is actually implementing one. There are lots of considerations which can often feel overwhelming.

Here, we have identified some of the key considerations which are consistently uncovered during technical site surveys.

## Six considerations for your contingency plan

### 1. What is your escalation procedure?

Every contingency plan needs to have an appropriate escalation process. Each shift needs to have somebody who can take a lead and know what to do in case of emergency. Ensuring that an escalation procedure is in place means you are in the best place possible to react, because an outage can happen at any time.

### 2. How much equipment is required?

The list of equipment that you may need can be endless. Whether it's power, high voltage power, or temperature control, having an understanding of how much equipment is needed is crucial.

### 3. Is your site accessible?

Infrastructure is key for any contingency plan. We have already touched upon site access within the technical site survey, but it is surprising how ill-prepared facilities are even when replacement equipment is delivered. Site access stretches to transportation, unloading and equipment placement, and that doesn't even cover connectivity.

### 4. Are you well connected?

When you do manage to receive critical equipment, one of the biggest challenges is

ensuring it connects. As not all machinery has the same connection requirements, it is imperative the existing site systems, such as cabling, pipework modifications or building adjustments are seen to ahead of the contingency equipment being installed.

### 5. Have you engaged all stakeholders?

Gaining approval from all stakeholders ensures that the contingency plan is signed off and actioned. The benefit of a contingency plan is that all costs are pre-agreed and budgeted for. Stakeholders range from facilities managers, finance departments, landlords and even customers. Leaving no stone unturned is key here and results in a smooth delivery.

### 6. Establishing fuel management services

How often do you need to refuel? This the final major consideration required when implementing a contingency plan for your plant or facility. Establishing the levels of fuel required, which again will be calculated in the technical site survey, is critical for re-establishing smooth operations.

There are other considerations, including having emergency engineers prepared, which will also be covered in a detailed plan following the site surveys.

# Benefits of a contingency plan

Any organisation that relies on power needs a contingency plan. The importance is clear, but the benefits should not be overlooked.

## **Insurance**

Having a contingency plan could reduce insurance premiums. If there is a disaster recovery plan in place, some insurers will offer litigation against any losses. It can also help to bring insurance costs down, due to the reduced downtime risk.

## **Immediate activation**

If a contingency plan is pre-agreed, then it can be delivered within hours. Customers will have a reference number, and once this is quoted the plan is in full flow. By having a plan, everything is pre-approved and in place for successful installation.

Additionally, contingency plans can be activated at any time of the day meaning you can immediately act should you lose power.

## **Fixed prices**

Another important element of a contingency plan is ensuring that a flat cost is sought. This allows power, heating or cooling failures to be budgeted for without the worry of extorted costs. Unfortunately, some suppliers may see an opportunity to raise the cost of the equipment.

At Aggreko, a flat rate is pre-agreed, meaning budgets can be managed and therefore no further surprises occur when you least need them.

## **Contractor availability**

When taking out a contingency plan, utilising a supplier which has trusted and nominated contractors available can also be a huge benefit. As power failures happen at the most unexpected time, sourcing a reliable contractor or engineer to come in on short notice is difficult. Aggreko has a number of service teams across the UK who are available to respond when a contingency plan is actioned.

# Final thoughts

If you were to lose power, would you be able to ensure all appointments and operations can continue? The number of risks facing the UK healthcare industry is rising. And these are out of our control. From extreme weather changes to overreliance on the national grid and through to ageing equipment, the chances of power failure are only likely to increase.

Having a contingency plan is therefore not just essential for providing that much-needed peace of mind should the unexpected happen, but also fulfils your patients' expectations that you are fully prepared.

And even if a contingency plan is in place, is it updated regularly with the correct contact details and site information?

Before making a decision, taking advantage of a complete site survey is an easy and cost-effective way for you to truly understand the risks you face.

To make a decision you need to be aware of your infrastructure limitations, equipment performance and energy reliance. Once you have this, you are well-placed to decide whether a contingency plan is a necessity for your organisation.

We cannot predict the future but we can ensure that any risk associated with power outage is mitigated. You will know the top-line impact equipment failure or a power cut will have on your facilities.

If this isn't actioned, then you run the risk of losing power, money and reputation. Can you afford to not have a contingency plan in place?

***If you were to lose power, would you be able to ensure all appointments and operations can continue?***



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# Case study:

## *County Durham hospital avoids operation cancellations*

After a headline-making week of hot weather in the UK, a County Durham hospital called upon its contingency plan to recover from a power outage.

### **Problem**

In the height of a week of unprecedented hot weather for the UK, a hospital in County Durham saw its main comfort cooling circuit fail in its operating theatres. With many operations lined up for the next few days, cancellations were not an option. The hospital needed a power supply delivered and installed on-site.

### **Solution**

The hospital first reached out to Aggreko in 2017, whose sector experts recommended the implementation of a contingency plan for the hospital. Covering all possibilities, from cooling equipment to generators, the plan was pre-agreed by all stakeholders and Aggreko had all the information required for swift implementation.

After the outage was experienced, Aggreko's contingency plan came into action. Its 24/7 response team supplied and installed a 200 kW chiller within just five hours from the initial call. As the contingency plan had been pre-agreed, Aggreko's engineers understood the exact installation process and ensured the chiller was immediately up and running.

### **Benefit**

Following the installation, the hospital was running as usual and experienced no further issues with its comfort cooling circuit. Additionally, all of the planned operations went ahead as scheduled, meaning no delays were experienced by patients.

For the hospital, the contingency plan had already been budgeted for. Aggreko offers a fixed price rate for all of its contingency plans, offering financial peace of mind for the hospital during an otherwise chaotic period of uncertainty.

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For more information

 **0345 824 7365**

 **[aggreko.com/contingency](https://aggreko.com/contingency)**