

# ROUNDTABLE **2007**

**ENERGY AND UTILITIES**  
**Building on best practice**

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# Energy and utilities - building on best practice

An introduction to the StrategicRISK roundtable discussion by **Sue Copeman**

The power and utilities sector is fairly heavily regulated in the UK and this discussion highlighted the need for organisations to achieve balance between the regulators' requirements for continuity, security and safety and the organisation's own additional objectives.

In the area of nuclear generation, safety is the main priority since a failure in this area would result in a plant being closed down by the independent body that governs this sector. Indeed, all participants agreed that failure to enforce a rigorous health and safety policy would impede their ability to attain corporate objectives and satisfy their stakeholders, and that instilling the right risk culture was integral to achieving such a policy.

Ownership and accountability were considered key elements of such a culture. Effective enterprise risk management involves building on and developing existing areas of best practice and enabling managers in other parts of the organisation to access this expertise and benefit from solutions developed for similar problems. One participant also stressed the importance of being involved in the strategic planning process where risk management can really create value for a company.

Service continuity was a leading concern for those organisations involved in the distribution side of the power and utilities industry, and climate change was

regarded as another very important issue. More extreme weather incidents such as the recent UK floods also provoke questions on the appropriateness of design standards, particularly since some utilities and power plants were constructed some years ago when such incidents could not be envisaged and planned for.

Environmental issues were also very important for participants, with awareness that an environmental problem could produce not only a financial loss but also severely affect reputation and brand.

There was consensus that regulators should consider longer term investment and strategy planning, say with a time horizon of 25 years. This was particularly important because of the length of time from conception to delivery of the necessary infrastructure. Such planning would also help to remove the uncertainties that this sector faces.

A recent global survey produced by Aon showed that the top risks perceived by the energy and utilities sector were reputation, environment/weather, regulation and business interruption. And these were very much the focus of this roundtable discussion.

**Sue Copeman, Editor, StrategicRISK**

**All participants agreed that failure to enforce a rigorous health and safety policy would impede their ability to attain corporate objectives**

SUE COPEMAN

## Roundtable participants



**Simon Allen, consultant, Aon Global Risk Consulting**



**Sue Copeman, editor, StrategicRISK, who chaired the discussion**



**Sarah Hardingham, director global risk management, InterGen (UK) Ltd**



**Geoff Miller, head of risk management, United Utilities plc**



**Kitty Sinclair, risk and insurance manager, British Energy Group plc**



**Kim Watts, head of risk assurance, EDF Energy**

**SUE COPEMAN:** Supply continuity is probably a concern which is at the forefront of all your minds. As you are essentially in the service sector, supply has got to be pretty key. So I wondered what sort of issues you have encountered when you have been looking at this? Geoff, what is your view here?

**GEOFF MILLER:** I presume we are talking about service continuity rather than our upstream supply chain?

**SUE COPEMAN:** I think I want to talk about both actually but maybe talk about service continuity first.

**GEOFF MILLER:** Well, we have a range of services that we provide. If I talk for example about electricity and water supply, I would guess most people within the service industry round the table are fairly heavily regulated and we have a number of key performance indicators that influence the regulators' view and, in some areas, our price cap and subsequent price reviews. Service continuity is very important to us and performance against those key performance indicators is absolutely key for it. On the electricity distribution side of our business, for instance, customer interruptions and customer minutes lost are key performance measures and one of the components that drives our investment programme.

**SUE COPEMAN:** I think that is a very good opener. Is that something which the rest of you would agree with or have you got different considerations?

**KITTY SINCLAIR:** Well obviously we are in a different game. We are not a service driven company at all, we are a wholesale generator so we don't deal with domestic market as such, we don't have the same parameters that will hinder our continuity of supply from that viewpoint. So for us it's about the supply chain, not service continuity.

**KIM WATTS:** I recognise everything that you said, Geoff, about the regulatory side of the business and having key performance indicators. We have a network asset management plan that is risk based, condition based monitoring that then drives our investment programme. In terms of our generation side, in terms of supply continuity, an issue for us at the moment and something that we have looked at quite closely are single point failures in power stations. Then there are the coal supplies to our power stations, gas supplies to our power stations, and the risks around those of which there are many.

In terms of generating, Kitty, do you have the same issues around single point failure in your generating plants on the basis that if relatively small pieces of equipment fail, that can take out your generating assets for a number of days?

**KITTY SINCLAIR:** That is a very broad question. We have hundreds of elements, which singularly contribute to the continuity of the unit itself. There obviously are elements in that which are more key than others and which may in turn cause the unit to trip, ie bring the unit off. We would identify what those units were, what those elements were and try to maintain a relative maintenance regime around it so it doesn't actually occur. Then we would aim to have spares so to speak and a remedy to try and bring that back as soon as possible.



**GEOFF MILLER:** I recognise what you say about a risk based investment strategy. Certainly in our water business the regulator is very much pushing us in that direction. I think there is an active engagement with all the water companies to move along that road so that we have a far more refined and mature understanding of where our principal exposures are in our asset base rather than having a variety of approaches perhaps dependent on historical origins or an individual manager's or a legacy strategy approach to it.

**KITTY SINCLAIR:** It is interesting to hear you say that because obviously for all of us investment is a key issue and where do we invest? As regards our regulator, their key interest is safety and our investment must ensure that the integrity of the safety cases around the plants are maintained and also that we look at worker security, etc. But I am sure that we all feel that there is the other side of the coin which is the commercial aspects of investment, where do you put your money in order to get your next mega watts? So there is the balancing act between investing for the continuity and security of the unit and then investing to make sure you can generate more income.

**SIMON ALLEN:** You made a good point in saying that health and safety is one of the drivers. I'd like to ask everybody what they think the key drivers are. What is driving your risk based decisions. Is it reputation, loss of revenue or the penalties that you might face?

**KITTY SINCLAIR:** We are a heavily regulated entity, nuclear generation is governed by a separate independent government body, and we must ensure that safety is our number one priority, particularly nuclear safety. And if we deviated or seemed to deviate from that, the safety case for that particular unit would not be supported and we can be shut down by an independent body. So for us it is essentially making sure that we apply a very prudent approach to safety and we always take the action that is necessary as soon as possible. We would never delay in

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**GEOFF MILLER**

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## Tackle things from the ground up

KITTY SINCLAIR

the means of safety and we are always more cautious than we need to be at times.

**GEOFF MILLER:** I don't think there is a simple answer to that question. In simple terms, I could say that health and safety is always at the top of our agenda. In a sense that is true, but there are probably half a dozen organisational drivers which reflect the complexity of our own corporate objectives and also the stakeholder mix that we have. We can't ignore customer service criteria or environmental criteria or commercial criteria that our shareholders have a keen interest in. But I think each of us would recognise that an organisation that doesn't pay appropriate attention to health and safety suffers on all those fronts. It is unlikely that you would be successful if you didn't have a rigorous health and safety policy and commit firmly to it.

**SUE COPEMAN:** Does that involve things like training staff?

**GEOFF MILLER:** One of the things I have seen is an increased maturity in the organisation's commitment to training generally. Health and safety has always been a kind of gold standard in terms of training but more broadly we have looked and are looking to develop our workforce with more formal accreditation than has previously been the case. A generation ago, somebody might have come onto a plant and served a period of 'apprenticeship' with the current operator and then been given responsibility for that plant, and the strengths and weaknesses of the incumbent would have been

transferred to the new joiner. Now we look for more comprehensive training and accreditation and regular re-certification of our operators than was previously the case. Health and safety is a strong component within that.

**SIMON ALLEN:** Do you think that the environment surrounding health and safety has changed significantly over the past few years? I don't just mean in terms of far more rigorous legislation in place and higher penalties, but do you think there has been a big shift with fear of law suits and things that have come about in the last few years.

**KITTY SINCLAIR:** I don't know necessarily that the change in attitudes has been from a fear of law suits. I think that there is just a recognition amongst all businesses that if you tackle things from the ground up then you are going to have a much more safe and productive workplace than if you take a piecemeal approach to it, concentrating on very high level issues and not dealing with the day to day working practices of your staff. We have a system that everyone has a task rated risk assessment which must be carried out for every job they do and someone will check that. We started at that very basic level and that supports everything that is done because everyone stops and thinks before they do something. It's an attitude, a cultural thing, rather than being driven by any external force.

**GEOFF MILLER:** I think we have seen a modest increase in litigiousness but to some extent that is probably more around our customers rather than our other stakeholders. However, we are a heavily construction orientated organisation and what has perhaps changed over the last ten years has been the construction design and management regulations that came in in the early to mid 1990s. I think we are having many of the same challenges that the rest of the construction industry is, facing the same questions as to what benefit have these actually brought to health and safety as opposed to imposing another level of documentation and process.

One of the changes that we have been introducing recently has been to review the health and safety policies and procedures that exist in our utilities solutions business as part of a broader initiative across the company to engender a greater sense of ownership and accountability for those individual policies. Previously it was a corporate policy, there wasn't necessarily a clear owner. Now there is a clear owner for each of those policies. I think that is part of an agenda that seeks to move our culture from being risk averse to being risk aware. It is very much the point you were making, Kitty, about stopping, identifying, considering the implications of a decision and an outcome and then taking a risk based judgement.

**SUE COPEMAN:** It's interesting that we started talking about supply continuity but the focus has very much switched to health and safety. The way the discussion has gone suggests that actually health and safety is the key issue.

**GEOFF MILLER:** Well, coming back to the broader theme of supply continuity, that is absolutely vital for us. We talked about down stream and up stream relationships. Kitty is from the generation side, we don't have a direct relationship with them, we provide their product through

nuclear industry pose. If it proves easier to decommission, it may detune the public sensitivities but if there are significant events during that decommissioning process it may exacerbate that sensitivity. Even with a long-term strategic plan, singular events can influence both public and political impressions of the appropriateness of that plan and cause a change in direction midway through it.

**SARAH HARDINGHAM:** Well there was the earthquake in Japan where damage caused a reactor to leak radioactive water. That certainly must have raised public awareness. I don't know how they will manage that in terms of trying to give more comfort to the local population or for the technology as a whole, but safeguards were there. I don't know the outcome. I suppose that will come out in probably months rather than weeks.

**SIMON ALLEN:** The initial reports suggest that that wasn't as bad as it could have been, other than the sad fact that a few people lost their lives in the earthquake. I think they only had a few drums of radioactive material tip over and open and they had a contaminated water leak to the sea. It could have been a lot worse.

**KITTY SINCLAIR:** I think the issue is what the stations are built to withstand in Japan that is coming under scrutiny at the moment, and the fact that they did not have a case around it for the magnitude of this earthquake. Questions will be asked about the other sites and potentially, if they are doing building, what should they be able to withstand.

**GEOFF MILLER:** You can see that issue of the appropriateness of design standards in other sectors as well. With some of the storms we have had in the UK, the mean and gust wind speeds are pushing beyond the design standards of the above ground infrastructure. For example, there was an issue with the reservoir in Yorkshire recently, and it appears that one of the problems might be the capacity of the overflow to discharge the volume arising from the rainfall intensity that occurred. As an industry we upgraded our reservoir overflows back in the 1980s based on a probable maximum flood criteria then but whether that remains appropriate 20 years later with the advent of climate change remains to be seen.

**SUE COPEMAN:** We tend to talk about the effects of climate change as happening more in the future but do you think that any of your organisations have actually noticed some of the effects of it already?

**KIM WATTS:** Definitely, yes. In the energy procurement and energy trading spheres you have a view of customer demand and one of the parameters is what the weather profile looks like based on the last 20 or 30 years. You're now having to consider how many years we're going to go forward seeing abnormal weather trends which are kind of bucking the underlying assumptions. So you then have to move to some more sophisticated analysis and scenario planning around what the weather is going to be doing for the next year, five years, ten years or further out.

**SARAH HARDINGHAM:** Well if insurers can rip up their underwriting tariffs and charts and criteria with hurricanes Katrina and Rita and realise that they have



underestimated the exposures and almost start again, we are at the sharp end of that. We have to be very aware of what changes we need to be forecasting. Everyone has the same issue.

**KIM WATTS:** The 1987 storm was supposedly a once in a 100 years storm, but we have had storms within the last four years of a certain magnitude. In East Anglia, for example, the power lines are generally overhead rather than underground. Rain makes the tree branches heavier, perhaps the storm comes from a slightly different direction than usual, and branches come down and can cause a lot of damage to our network.

**GEOFF MILLER:** In the Carlisle floods, it wasn't just rainfall, it was high winds across north west England that caused significant problems for us. We were subjected to the loss of an electricity transformer station where we take supplies off the National Grid because the river rose to a level 12 feet higher than it had been previously and inundated the station. But it would not have been a supply problem for us had the high winds not taken out the alternative feed by bringing a tree down across it 30 minutes prior to the station being flooded. We were not alone in that experience, the emergency planning centres in Carlisle were flooded, so the whole issue of risk from river inundation complementary to other aspects of storm damage is fairly key for us.

**SUE COPEMAN:** Do you take into account that kind of interconnection when you do your continuity planning?

**GEOFF MILLER:** Increasingly we do. Being a multi utility we recognise the interactions because we are the electricity distribution network operator for much of our water supply region so we are reliant on grid

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our distribution network, it having been passed to us by a third party, the National Grid, so our relationship is less with the ultimate upstream provider but more with the intermediary, the National Grid.

**SUE COPEMAN:** So in a sense Kitty is your end supplier as it were but with somebody else in-between?

**GEOFF MILLER:** Yes but given the diversified nature of the generation industry if there were problems in Kitty's particular organisation that would probably not impact us. It would be a major issue for her but less for us. To some extent that reflects the resilience of the UK's transmission infrastructure.

**SUE COPEMAN:** You are also involved in water supply, aren't you, and I saw recently that the Environment Agency was talking about a long term plan involving managing water supply in the environment of climate change. I think everybody in this country used to think that water was the one thing that was there and fairly cheap and easy to get and it clearly isn't now. Does your work in any way involve managing or advising in that sort of area?

**GEOFF MILLER:** Well certainly a significant change for us has been the appointment of an environmental director within our utilities solutions business. There is an increased focus on our carbon footprint so that is one element of change.

You mention the Environment Agency's stance and I also noticed recently that Thames Water got approval for a desalination plant for the South East – and that's a very unusual step for a water company within the UK. What we are recognising is that climate change is a significant issue for us. The regulatory process generally works on a five year cycle and to address the kind of issues that we are facing or can see we are facing with climate change, we are probably going to have to move to a far longer planning horizon. We are encouraging the regulator to think towards a 25 year horizon for investment planning and strategy.

**SUE COPEMAN:** Looking at raw materials supply, there is a lot of talk because of the scarcity of oil or the cost of excavating remaining sources of oil, saying that we are going to have to build more nuclear power stations. As a risk manager, Kitty, how does that seem to you?

**KITTY SINCLAIR:** Well, from the point of view of security of supply of the core material, uranium is what we would use within nuclear plants. The price of uranium has increased dramatically over the last year to 18 months and that is a factor of the supply demand within that area. We have security of supply at the moment. We put in place forward agreements to secure that supply and essentially store to some degree what we may require for the future.

The other way to look at it is that the uranium that comes out of our plants can be reprocessed. When it comes out of the reactor, it has only used up a very small percentage of its actual usage and it goes through the reprocessing element. You can almost say there is an infinite supply as you are reprocessing it continually.

Is there a real risk that there will be no uranium left in the future? That is a very difficult question to answer. From our point of view we are very comfortable that we have the necessary access to the supplies that we



would require for the current lifetime of our stations. The new builds process is something which is obviously not decided yet. What I have heard is that there is no immediate need to be concerned that the building of future nuclear plants around the world - not just in the UK - would lead to pressures on supply. It is very much going to be a fact of managing the supply chain and the supply flow so that it is available when it is required rather than being there but not physically available to the users within the period that they necessarily need it.

**SIMON ALLEN:** Uranium is pretty unique in that in general it is mined in areas that are fairly stable politically, for example Canada is a major uranium producer.

**KITTY SINCLAIR:** Mining of the uranium is one issue and there is the resource still to be mined. But the political stability issue with the reprocessing of uranium is a tad different. In terms of the areas that have the reprocessing capabilities, although these include some areas of the US, they tend to be Russia and ex eastern bloc countries which perhaps are less stable and that could cause some concerns.

**GEOFF MILLER:** But we may be talking about issues here that essentially require a political decision, and the kind of timescales to invest in the necessary infrastructure consequent upon that political decision are probably what engage our organisations in long term strategic planning. For example, in the case of a new reservoir, it can take 10 to 15 years from conception to delivery of

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that infrastructure. So we need the certainty of the regulatory and political environment to have comfort in that sort of fairly major investment over that time period.

**KIM WATTS:** That is the sort of issue that I recognise for my own business. It is - what is the generating portfolio mix for the UK going to be over the next 15 or 20 years? We have seen, for example in the renewables sphere, that when it has become topical to go down a renewables route everybody is competing for the same major pieces of equipment around the country and you find the price goes up. It's not exactly a herd instinct but you can see people moving in the same direction so there are pressures on price. I can see the same thing happening in the nuclear sphere when UK decides what its portfolio is going to be. I don't know what your views are on that are or how far the nuclear lobby has progressed but in terms of environmental issues, one of the things that nuclear does give you is a low carbon option.

**SUE COPEMAN:** Before we move on to environmental issues, can I ask you, Sarah, whether you would like to share some of your problems, or otherwise, on supply continuity?

**SARAH HARDINGHAM:** When we are developing new projects, the issue for us is the sole source supply for equipment or the very narrow field of equipment suppliers available. We have to look down the line at suppliers' capabilities to deliver to us to meet our construction schedules. That's a key element. Across the fleet generally, there are obviously fuel issues. We have a

mix in our portfolio of gas and coal so we spread the risk in terms of different areas of activity but it is very often difficult to find alternative sources of supply at short notice in some of the outlying areas that we are in. We analyse all those risks at the outset as best we can but that is as far as we can go.

**SUE COPEMAN:** Have you all got supply chain continuity crisis management plans in place? And how detailed is the planning?

**SARAH HARDINGHAM:** We have crisis management plans and disaster recovery plans. I haven't seen the detailed supply chain plans but we are very active in risk profiling and determining the risks that are out there and so the answer to that is yes.

**SUE COPEMAN:** How about you, Kim?

**KIM WATTS:** I would say the same. It is also around the integrity of the supply chain and I would link that to the ethical policy we have. We source coal from around the world and have to make sure that we are ethically sound as regards where we source that from. Then it is the physical movement of the commodity across the seas, across the rail infrastructure, into power stations - single points of failure along that as well and what we do about that. The thing is to get people thinking about business continuity as part of their good management process. One of the things I am looking to engender is almost taking the risk management title out of the equation and equating it with good management and forward thinking rather than boxing it up and saying it is risk management so that there is the potential for someone to say that risk management is done over there - 'I don't need to do that, someone is doing that for me'. It should be just part of the key trait of management.

**SIMON ALLEN:** Well that is a great point because it has been said that the risk managers' ultimate goal is to put themselves out of a job.

**KIM WATTS:** Precisely.

**GEOFF MILLER:** We have operated risk management forums at a corporate and, in the case of my former division, a divisional level for probably five or six years now. We are moving away from those forums in the belief that risk management should be clearly on the line management agenda and that to have those discussions out of that line is less effective and appropriate. The countervailing argument is that the discussion used to take a couple of hours to air while management agendas are more time constrained so it is not always possible to get the same level of exposure and debate on risk topics. But nevertheless our decision has been to move the topic back into line management and not run it as a parallel debate.

**KIM WATTS:** And that almost happens by osmosis in our organisation at the moment. You will find the best practice involves someone running their management meeting based on their risk - 'this is my risk to the business and therefore these are my key issues'. But it's still rare, so it's something to aim for, again it is the cultural issue.

**SARAH HARDINGHAM:** It is embedded in the culture of risk management but there can be so many people in a

company with the title of risk management that it can be very difficult for outsiders to determine which aspect of risk management they're involved in. We have a matrix organisation so, whenever and wherever the need arises, we can pull together teams of people who can investigate and analyse or do whatever the issue of the day might be. It works extremely well for us.

**SUE COPEMAN:** Have you had to work at getting risk management into the culture of the organisation or has it happened almost by osmosis? Has anybody here actually sat down and said 'yes, we are going to put in ERM and we are going to embed it through the organisation and these are the steps we are going to take'?

**GEOFF MILLER:** I think you maybe start with that aspiration and realise what a challenge it is. But your initial introduction assumes that you're working from a blank sheet of paper. In reality there are levels of capability and expertise in the business and many of them are islands of excellence. Really you are looking to build from those to roll out that capability within the business. We use what we call peer group enablers so I have a traffic light matrix of 16 roles, eight business stream columns with red, amber and green assessments of capability in building an infrastructure for risk management. If people are having an amber or red rating day there are generally people who have got an amber or green rating to capitalise on, so they can peer over the fence at what one of the neighbours is doing. So there is a lot of expertise out there already.

**SIMON ALLEN:** Everyone manages risk in their own ways and perhaps risk management is in fact a bit of a misnomer. Everyone from the board down to managers down to someone whose job it is to maintain a piece of equipment - they have all got risk running through their heads and they are all aware of it. It may not be on a specifically conscious level, they may not give a talk about it to someone else within the organisation, but at least you know it is there. It is a matter of building on that, taking what is there and growing that up as part of the culture rather than perhaps forcing a cultural change.

**KITTY SINCLAIR:** I agree, we are supporting the culture. So, for example, when you have a group of maintenance engineers sitting discussing a problem and they find a solution to fix it, you ask yourself whether they may have that problem somewhere else in the organisation - do the guys up the road have the same issue? And it is putting an enabler in place that allows them to highlight that problem and for other people to access it and realise that they need to be aware that that it could be an issue for them, and then developing those enablers further and changing them into something that actually allows you to capture what the common issues are, or the serious issues that could really influence where you want to be.

**SUE COPEMAN:** Shall we move on to the environmental concerns which we have touched on slightly already? Would any of you like to give me a quick run down on your own environmental concerns and the amazing things that you are doing about them?

**SIMON ALLEN:** What about the national allocation plan and European emissions trading scheme, is that a big issue? We're just finishing this compliance period and coming to the second one.



**KIM WATTS:** From our perspective yes but it's at two levels. There's the level we know about, and we can manage that. But it is what is coming next that concerns us and the risk associated with that appears high up on our risk register.

**SIMON ALLEN:** I think that comes back to the point that you need a long term view, ideally a 25 year regulatory plan. And that brings back the question of certainties. Some of our clients find that one of their biggest concerns is that they don't know what is going on, there are so many people saying different things.

**GEOFF MILLER:** Your point about uncertainty is valid. It is difficult for our sectors and individual organisations to derive that certainty and then persuade the regulator on a particular course of action. We tend to operate in the range of consortia with a variety of R&D perspectives to try not so much to remove the uncertainty but to reduce the range of predictions associated with uncertainty. I think to a degree there is proved clarity on what the range of certainty is now, but given that our regulatory reviews tend to occur on a five year cycle, the opportunity to influence those and the extent to which a regulator takes account of our views may be limited. For example, with the last price reviews for water and electricity, there were varying approaches to the acceptance of climate change forecast there. We need to work as an industry to influence the regulators and the regulators really need to participate in those discussions rather than take a hands-off view until the price review proposals come forward, at least that is my opinion. But I think in our organisation we are tending to work on a slightly smaller scale. We are doing those things which we believe are responsible and to a large extent have an economic driver, so we will be looking at combined heat and power for instance in our waste water treatment plants where the methane there can be used to generate electricity and save costs. So it is

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**SIMON ALLEN**

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## You're now having to consider how many years we're going to go forward seeing abnormal weather trends

KIM WATTS

from the strategic to the tactical really that we are addressing this. As I said earlier, we have appointed an environmental director to look particularly at climate change issues. It is a very much more on our agenda than it was a couple of years ago.

**KITTY SINCLAIR:** We are not carbon emitting from our nuclear fleet certainly. We do have one coal fired power station, which is a 2,000 megawatt unit. We took steps some years ago to address the emissions coming from that unit and we have retro fitted two of the units with FDG (flue gas desulpheration equipment) to enable us to deal with the requirements that will be placed upon us in the future. Two of the units don't have FDG and we potentially could be looking at running at maybe 20% of the capability which is a major influence for a generator like us that requires flexible generation capacity. We are talking about environmental issues but we have got concerns in running those units at 20% of the power that brings other issues in from an operational perspective, rather than running them as they were designed to run which is at the full capacity.

Nuclear power doesn't get good press from an environmental standpoint even though it is not a carbon emitter. It always seems to have a black cloud over it whenever issues are discussed around the environment, particularly nuclear expansions. But we very much engage with the communities and get involved in conservation efforts round the sites, most of which have conservation areas around them, bird reserves, etc.

**SUE COPEMAN:** Have any of you looked to transfer your environmental liability risks through insurance?

**KITTY SINCLAIR:** One of the key concerns for us in the future is going to be the introduction of the contaminated land regulations and how that impacts on us and can our insurance as it stands deal with that? There have been discussions between government, the nuclear insurance

industry, etc, to try and work out how we deal with that in the future and who will be responsible because the contaminated land may not be discovered for many years and at that point we may have already transposed the site to the government entity that is responsible for decommissioning. That comes back to the point that discussions tend to start and become very lengthy and convoluted, and sometimes the operators are the last to know what will actually be occurring. Then it is up to us to try and retro fit solution around what has been placed on us by the relevant regulator or government body.

**SUE COPEMAN:** But how easy is it to influence regulation? A great deal seems initially to stem from Brussels rather than national government.

**SARAH HARDINGHAM:** We willingly embrace the opportunity to have dialogue with regulators.

**KIM WATTS:** I understand that the Environment Agency can restrict operations at coal fired power plant because of fallout from a chimney affecting the local environment. They have the authority to tell you to sort your act out and clean up but you lose in terms of not just business interruption but also your reputation in the local area, you are probably in the press so it's affected your brand. That is a real risk and it is one we recognise - the power of the Environment Agency - and that's a UK body, the risk has not come from Brussels. I think it does reflect an increasing awareness in the general public's perception of power stations.

**SARAH HARDINGHAM:** We have an advantage in that our fleet is relatively new. Our first power station, Rocksavage, started construction in 1996 and went into commercial operation in 1998, and the environmental mandate has always been very high on our list of priorities. So we have been able to construct plants not just to meet all the existing standards but to try to go one better, and obviously with the project financing that we have, the bar is raised very high in relation to what is allowed and what is not allowed. In the UK we don't have the problems of ageing plants and having to retrofit. And we have community programmes, community outreach.

Talking about habitat, at the Rocksavage site the great crested newt had to be protected so we built special ponds and recreate its habitat, made sure construction equipment didn't go into certain areas on site, etc, and now the newt population is increasing. When we were building another plant in the UK, we had to plan the construction schedule to remove trees after completion of the nesting season. Those are the types of steps you have to take in order to really promote the environmental mandate. We have a strong record.

**GEOFF MILLER:** What that illustrates too is the way in which the energy supply mix is changing and that to some extent influences the supply chain management issues as well. There was the dash for gas in the 1990s and so, if there were a significant event in the National Grid for instance, there would be increased demand on the gas generators. I think the industry is exploring their ability to withstand that demand.

A feature for me in the longer term is that the nuclear decommissioning programme is beginning to get underway. The ease or the difficulty with which projects will be completed within that programme may well influence the public view of the damage or the threat or the risk to the environment that the by-products of the



## Providing your organisation's radar is working, you can identify where European directives are beginning to form

GEOFF MILLER

supplies, incoming main supplies, and if we are unable to receive those we have to provide standby generations to ensure that our plants to continue to operate. But one area that is probably not well recognised is the inter-sector potential for consequential damage. We have a number of assets that potentially if they were to fail could have a consequence beyond the boundary fence. Because of the security classifications associated with each other's critical national infrastructure we tend not to share the impact with other sectors. It's part shared to a limited extent with the category 1 responders that you deal with in local resilience forums. It is not shared as well cross sector so we may impose consequences on you or vice versa and not realise the significance of those consequences and the need to protect those assets that generate those consequences to a higher level that might otherwise be done.

We were slightly better at this with Y2K. The Y2K utilities group to a degree shared that information but that was pre 9/11, pre 7/7, and I think to a large extent the shutters have come down now on sharing that knowledge any more widely than is necessary. But to some extent we are disadvantaging ourselves by that approach.

**SUE COPEMAN:** What do you think are the key problems or issues that face you on an every day basis?

**KIM WATTS:** I would say the topics we have looked at today but I was talking to Simon prior to this discussion about a report that's been prepared on the top risks. So, Simon, what are the utility companies saying are their major risks?

**SIMON ALLEN:** Aon recently conducted a survey of client contacts in a number of sectors throughout the entire globe. This was a survey centred around culture, to

try and understand how risk management culture was embedded in an organisation, but it also looked at key risk areas. For example, in general the top four risks across the whole survey were reputation, business interruption, third party liability and supply chain. For energy and utilities, they were reputation, environment/weather, regulatory and BI.

**GEOFF MILLER:** How many companies have actually quantified their risk capacity against those exposures to the point where they know whether their exposure is at or below their tolerance level?

**SIMON ALLEN:** The survey asked how well companies had prepared for a risk and whether they felt they had got it covered.

**GEOFF MILLER:** It may be that the financial impact tends to be the lowest common denominator in quantifying these risks. How satisfied are you that your organisation could take that level of hit without blinking? We have begun to refine our understanding of our risk capacity at board level which is very useful because it provides a framework for employees to understand the resilience of the organisation and the relativity of the risks they personally manage. It begins to put in context for senior managers the need to address risk management more significantly than perhaps they might have if they realise they have got ownership of an exposure that exceeds the organisation's risk capacity. That is one of the drivers for embedding risk management.

**SIMON ALLEN:** One of the things I found really interesting was that reputation was sitting on top not only across the board but specifically in energy and utilities. It is very difficult to put a financial figure on reputation and if you are trying to quantify it for risk management, it's a slippery topic.

**GEOFF MILLER:** Market capitalisation might be one way.

**SUE COPEMAN:** I have seen in two recent surveys that in the UK regulatory risk tops the bill and to a certain extent what you have been talking about today tends to bear that out. Maybe it comes back to the UK being a very keen enforcer of the different regulations that come out of the EC. I have heard people say that the UK is actually putting its industry at a competitive disadvantage because we are enforcing these standards so rigorously, regulations which apparently in some European countries might just be met with a shrug!

**SIMON ALLEN:** I don't think it's the enforcement of health and safety regulation, that makes sense, it is an important factor, but maybe it's enforcement of useless regulation, redundant things. In many areas there are forms that constantly must be filled out, there are processes to follow that. It just makes everything so much more tedious and onerous when it could be done in a much more simple way.

**KITTY SINCLAIR:** Essentially all of us here, I think, would say that we are self-regulated and that the regulatory body oversees what we do and expects us to do it in a manner that satisfies the intention of the over-riding legislative acts. So we don't feel it is necessarily a burden. It can be a burden depending on how you adapt it and distribute it across the organisation. It's a matter of how you interpret it in your own organisation, how you

impose it, how you encourage it as part of a normal working environment rather than something that is a tick box exercise.

**GEOFF MILLER:** My impression is that you need to look at this from different time horizons really. In the short term, the die is cast in relation to directives and national legislation that flows from these directives. There is not a great deal you can do about that. In the medium term, providing your organisation's radar is working, you can identify where European directives are beginning to form around concepts, ideas, and the opportunities are there to influence the debate and the direction of those directives before they are determined and transferred into statute. It is hard work but it is worthwhile work to influence future direction. In the long term is the idea of European nations co-operating to reduce barriers to trade, to improve individuals' ability to move around Europe, to reduce the likelihood of future wars within Europe. My personal view is that this is good, but from a corporate perspective you need to determine what is relevant to you, what potentially you have the capacity to influence, and then put relatively scarce resources in the right position to have the most impact you can.

**KITTY SINCLAIR:** Certainly I support that. We are very actively involved in the discussion groups which are encouraged around forthcoming legislation, as I am sure you all are, and very much welcome the opportunity to have an input into that.

**SARAH HARDINGHAM:** It is better to be proactive. Being a passenger would be bad news for business in our industry sector.

**SUE COPEMAN:** What do you think are the important issues for you? Are they communication, embedding risk management, getting the right funding, problems with trying to buy insurance or find other appropriate risk transfer instruments? Perhaps we could go round the table on this one before we finish.

**GEOFF MILLER:** It goes back to the comment you often see in the first chapter of the risk management text books, don't try and go down this road unless you've got the serious engagement of the board. Anything that you try and do within your organisation to influence risk management isn't going to go very far without the credibility and resources necessary to implement the infrastructure that you need to foster, facilitate and grow risk management as a capability within your business. Once you have got that it is still not easy and you shouldn't presume that you bring risk management in with a missionary zeal to your organisation. There is a lot of capability and understanding out there already. What is important to me is getting that infrastructure in place which builds on the skills that we have got, complements those skills and shares best practice across the board.

**KITTY SINCLAIR:** Some of the issues we have spoken about today are highly significant for us. Environmental issues are crucial to us, as is supply chain. We have an ageing fleet which is something we are focusing on. Business continuity in its widest context is also an issue.

**SARAH HARDINGHAM:** Business continuity is definitely one for us. Our fleet has been operating for the longest part coming up for nine years now; we are building on that experience. We are still relatively new in terms of



the other companies represented here. We buy into the philosophy of highly protected risk status for all of our plants; we are actively working to gaining that status and we see that as key to our success. It certainly helps to bring down our insurance costs and it engenders a higher standard of safety and security as well for the staff on site. We have more eyes and ears and third parties investigating us to see if we are running effectively and properly and adhering to those standards. The bar is raised high and we are happy to have that high bar - that is in our culture. But we do have the advantage as a relatively new company that we don't have to change the culture, we can drive the bus as we go along which helps.

**SUE COPEMAN:** How about you Kim? What are your key issues?

**KIM WATTS:** ERM definitely, specifically being involved in the strategic planning process at the front end rather than at the back end. Linking risk management to performance management, where "good management is good management", and an integral part of that is risk and performance management, hitting the targets. Do you have the right measures, do you understand the risks to your business and more importantly can you demonstrate that understanding to other people?

Compliance enforces minimum standards, some discipline in the business, and one can see a value in limiting downside risk by containing the fallout but it is difficult to demonstrate value for money. That's why it is important to be involved in the strategic planning process, that's where you can really help create value for a company. So we want to move away from the downside to thinking how you can create and preserve value within the business and the potential for destroying that and to think of it at a strategic level.

**We want to move away from the downside to thinking how you can create and preserve value within the business**

**KIM WATTS**

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