

ENERGY RESILIENCE



RISK ASSESSMENT

CONTINGENCY PLANNING



What can go wrong.....

December 2008 Rossendale, Lancashire Loss of gas supply to approximately 20000 consumers.

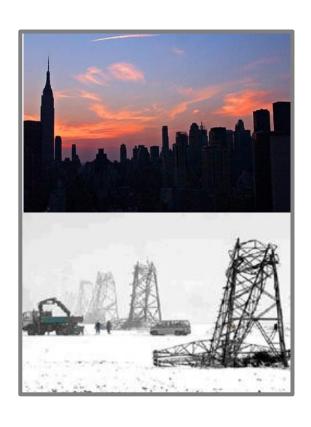
August 2004 Ghislenghien, Belgium Failure of high-pressure pipeline, 21 people killed.

October 1998 Victoria State, Australia Explosion at processing plant, loss of supply to 1.4M.





What can go wrong.....



August/September 2003

 London protection failure

 New York cascade failure

 Italy tree growth



What can go wrong.....

- Failure of local supply networks
- Damage to electricity supply.
- Damage to gas services.





Contingency arrangements......

There are arrangements in place to protect supplies to critical infrastructure.

Gas priority consumers are at the bottom of the list of sites subject to firm load shedding.

Electricity priority consumers are protected against rota disconnection.

Only effective in a limited number of scenarios.



Contingency arrangements.....

- Dual circuits supplying the site.
- Back-up generation.
- Demand reduction measures.
- Shut-down and relocation of production.
- Liaison with the local electricity network operator.

Cost/benefit analysis.





Contingency arrangements.....

- Dual service connections.
- Alternative fuel supplies (dual-fuel).
- On-site demand reduction measures.
- Shut-down and relocation of production.



Cost/benefit analysis.





Further information.....

Lead Government Department

Regulators

Professional Organisations



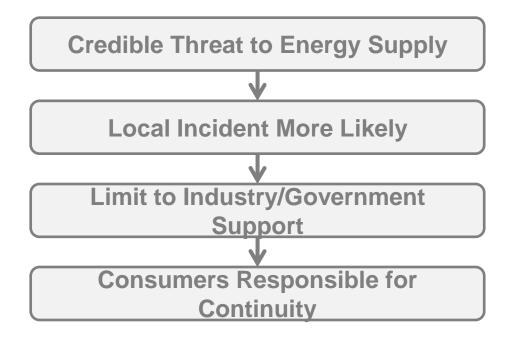








Conclusions.....





Conclusions.....

- Carry out risk assessment.
- Implement contingency arrangements.
- Work with local energy network operators.
- Seek advice and guidance from regulators/government.

Regularly test and review contingency arrangements.





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