

# Risk Matrix

**STAY ON TOP OF YOUR GAME**

Risk Matrix	Consequence					
	Minor	Low	Moderate	Major	Severe	Catastrophic
Likelihood						
Almost Certain	L	M	S	H	H	H
Likely	L	M	M	S	H	H
Possible	L	L	M	S	S	H
Unlikely	L	L	L	M	M	S
Rare	L	L	L	L	L	M

## Level of Risk

<b>H</b>	<b>High</b> – seek authorisation to proceed without risk reduction from your <b>General Manager</b>
<b>S</b>	<b>Significant</b> – seek authorisation to proceed from your <b>Site Manager</b>
<b>M</b>	<b>Moderate</b> – seek authorisation to proceed from your <b>Supervisor</b>
<b>L</b>	<b>Low</b> – proceed and manage using routine methods

Consequence	Area of Consequence				
	Financial Impact	Health and Safety	Environment	Security	Plant Availability
Catastrophic	> \$100M loss	Multiple fatalities	Irreversible long term environmental harm.	Terrorist attack on plant or people, malicious damage to IT and infrastructure.	Loss > 4,000 GWh
Severe	Up to \$100M loss	Fatality	Environmental release, large, offsite, reversible in > 100 days.	Violent demonstration threats to site personnel.	Up to 4,000 GWh
Major	Up to \$10M loss	Permanent disability (e.g. serious lost time injury)	Environmental release, large, offsite, reversible in up to 100 days.	Trespass with criminal intent, vandalism, and breach of site security by protestors or bomb threat.	Up to 400 GWh
Moderate	Up to \$1M loss	Reversible disability or impairment (e.g. short term lost time injury)	Environmental release, small, offsite, reversible in up to 10 days.	Fraud or theft < \$10K, off site protest.	Up to 40 GWh
Low	Up to \$100K loss	Short term medical treatment injury	Environmental release, small, offsite, reversible in up to 1 day.	Low impact incident – theft or trespass.	Up to 4 GWh
Minor	< \$10K	Low level, short term injury (e.g. first aid case)	Environmental release, contained onsite.	Gate left unlocked or graffiti.	Loss of < 4 GWh

Likelihood	Likelihood of Occurrence	Description	Health and Safety References/examples
Almost Certain	Almost certain	Happening now or expected within the next year; or 99% probability of occurrence	<ul style="list-style-type: none"> <li>Vehicles may exceed speed limits on site by less than 5 km/hr when appropriate controls are not in place.</li> <li>In certain areas (e.g. boiler house) exposure to noise may exceed 85db.</li> </ul>
Likely	1 in 10 probability	Balance of probability will occur within the next 10 years; or 10% probability of occurrence	<ul style="list-style-type: none"> <li>PTW system (If process not followed) wrong plant isolated, persons working on energised plant, isolation not tested or ineffective at controlling energy source.</li> </ul>
Possible	1 in 100 probability	Could occur at some time in the future; or 1% probability of occurrence	<ul style="list-style-type: none"> <li>Grievous bodily injury, loss of limb or permanent impairment from a combination of factors which are known to occur.</li> <li>Protest event prevents production of power for more than a week.</li> </ul>
Unlikely	1 in 1,000 probability	Not likely to occur; Very unusual in business or industry experience; or 0.1% probability of occurrence	<ul style="list-style-type: none"> <li>Single fatality due to an event which resulted from an unusual combination of factors.</li> <li>Failure of all safety precautions taken on site to prevent the incident occurring.</li> <li>On site security breach with loss of life.</li> </ul>
Rare	1 in 10,000 probability	No reported occurrence; or 0.01% probability of occurrence	<ul style="list-style-type: none"> <li>Uncontrolled and catastrophic failure of the boiler or turbine causing complete and irreversible damage.</li> <li>Multiple fatalities due to one event occurring at one time.</li> <li>Terrorist threat on all plants.</li> </ul>