Arnot Power Station General Hazards and Risk identification

Hazard	Associated Risk	Consequence
Access egress	Traffic jam at the main entrance gate during peak hour	Delays
Multi-level working	fear of heights Fall from height	Panic due fear of height
Fall of persons	fall from ladders and scaffold	Serious injuries and or death
Fall of Objects	Property damage and injuries	Serious injuries and or death
Slip /trips	Presence of tripping hazards	Injuries
Confined spaces	Danger of engulfment	Death and unconsciousness
Contact with process/Equipment	pinch by and cut by incidents	injuries
Working with Electricity	electrical shock	electrical contact may result in electrocution and serious bodily injuries
Fire and explosive atmosphere	Presence or usage of explosive substances and vessels under pressure	serious injuries and property damages from emanating explosions
Vibration	Working In and around vibrating machinery and tools	adverse health effects
Lifting Operations	Incompetent lifting machinery operators	property damage and catastrophic events and death
Vehicles	Speeding and lack of observations	property damage and incidents
Manual handling	Lifting unsafe load and heavy material	wrist hand and back injuries
Machinery and machinery guarding	Defective and lack of guarding	caught by and caught in-between
Mobile or fixed plant	uncontrolled movement of Mobile equipment	section 24 incidents
Adjacent live plant or equipment	Exposure to hazards emanating from adjacent plants	injuries resulting from contact with secondary hazards that were not defined as risks prior
Hand or power tools	Damaged or defective tools	Usage of defective tools may result in serious injury to personnel (hands, wrists, face etc.)
Hot Processes	contact with steam or hot surface	Burns and serious injuries
Environmental hazards	Contact with bees, snakes and other venom	allergic reactions or poisoning
General Working environment	contact with various workplace hazards	Variety of unfavorable health and safety concerns
Temperature (high /low)	contact with hot surfaces or cold stress related issues	heat/cold stress and frost bites
Noise	Exposure to High industrial noise	Probable Noise induced hearing loss
Hazardous substance and agents	contact with hazardous agents	irritation / poisoning and asphyxiation
Acid /Alkalis/solvents/gases	exposure to hazardous chemical agents	irritation and other health complications
Dust and fumes	Exposure to coal dust and fly ash and irritant fumes from normal operation	irritation of eyes and nose from inhalation of dust and fumes

Open waters / drowning	open dams /cooling towers and terminal reservoirs	danger of falling into and drowning
Ionizing non-Ionizing radiations	presence of radioactive material	cancer causing agents
Lone working	Employees working alone and isolated	unnoticed self-harm and stress
Non-adherence to procedures and requirements	Work stoppage	Works stoppages and delays due to Non conformances
Ergonomics	Poorly designed tools and ergonomically unsound equipment	Ergonomics related health implications
Excavation works and open trenches	Falling through open holes and trenches	serious injuries and deaths
Explosive atmosphere	Presence or usage of explosive substances and vessels under pressure	serious injuries and property damages from emanating explosions
Hot works	Sparks and fumes	Fire and burns
Lighting	Poor lighting	Tripping slipping and injuries
Ladders Scaffold work and suspended platform	fall from ladder sand scaffolds	use of unsafe or faulty ladders and scaffolds
Interfaces with third parties and contractors	Work in coordination / poor information / unknown presence of personnel on site	Collision with tools and materials and machinery, injuries resulting from falling tools
Inclement weather	working and driving in misty conditions	Reduced visibility
Vehicle and pedestrian interface	improper operations and driving of vehicles at unacceptable speed	incidents leading to serious injuries and death
Systems designs	Inappropriate designs	injuries and accidents
Management of change	Absence of management of change	injuries and accidents from mismanaged change