



Deeside CCGT Power Station
TASK RISK ASSESSMENT

Area Description: Site
Area ID Number: GE2.1

Task Title: Name of Task(s)
 Guided tour of plant for children as part of educational site visits. Revision 4.
 To be Conducted in accordance with Location Procedure: ADMLP028

Number of Personnel: Note numbers and type of personnel required to perform task
 Varied. Adult to children ratio minimum 1 to 10. The exact ratio will be determined based on the particular needs of the children. Children identified as having additional special needs, for example, will require closer supervision and care, or even a one to one adult to child ratio.

Description and Purpose:

Note plant operating parameters where possible, eg pressure, temperature and flow rate, and whether the task is performed with the plant in duty or on standby. Note whether the task is routine and the frequency of the task e.g. once per month.

In order to develop Deeside Power Station's education and community links, guides tours together with a number of curricula based activities have been arranged, which focus on helping young people to develop technology skills and enhance their knowledge on electricity and the environment. All activities have been matched to the National Curriculum for the UK including the STEM Agenda Science Technology Engineering and Math's.

These tours take place once a week during term time and are supervised by 3 education guides employed by DPS. Teaching staff and parent helpers accompany the school and take part in the supervision and in the guided tours.

Deeside CCGT Power Station

HAZARD SEVERITY CATEGORIES AND LIKELIHOOD CATEGORIES (TASK ASSESSMENTS)

Hazard ID No.	Potential Hazard	Hazard Severity	Protective Features/Safety Devices	Likelihood of Occurrence	Risk			Additional Protection / Recommendations
	Identify potential hazards from passive and maloperation	Category 1 to 9	Note protective devices or features present and their apparent state of repair (include warning signs)	Category 1 to 9	A	B	C	Note any simple additional protective measures which may be taken
GE2.1.1	Danger from Traffic	9	10 MPH Speed limit on site. Volume of traffic is controlled to a minimum by security staff. On arrival at site children are normally transported by vehicle from main gate to resources building. Children are personally supervised at all times. Children wear high Viz jackets at all times during tour of site. Zebra Crossings on site. Designated Route.	2		B		None.
GE2.1.2	Noise from operational plant	6	Noise survey carried out. Trained Guides ensure that children wear approved hearing protection at all times on plant. Children are personally supervised at all times. Ear Protection provided	1			C	None.
GE2.1.3	Electric shock from unauthorised/inadvertent contact with electrical equipment	9	No exposed conductors within reach on designated route. All high voltage compartments locked and access strictly controlled. Trained Guides keep children within designated route at all times. Children are personally supervised at all times. Energy Garden Power House operation 12V only. All electrical installations certified in line with IEE requirements.	2		B		None.

Note: Severity categories, likelihood categories and their corresponding risk categories from HS/GN-001

Deeside CCGT Power Station

HAZARD SEVERITY CATEGORIES AND LIKELIHOOD CATEGORIES (TASK ASSESSMENTS)

Hazard ID No.	Potential Hazard	Hazard Severity	Protective Features/Safety Devices	Likelihood of Occurrence	Risk			Additional Protection / Recommendations
	Identify potential hazards from passive and maloperation	Category 1 to 9	Note protective devices or features present and their apparent state of repair (include warning signs)	Category 1 to 9	A	B	C	Note any simple additional protective measures which may be taken
GE2.1.4	Burns from contact with hot pipe work	5	No exposed hot pipe-work within designated route. All pipe-work lagged where practical. Trained Guides keep children within designated route at all times. Children are personally supervised at all times.	3		B		None.
GE2.1.5	Entanglement in running machinery	9	No unguarded rotating machinery within designated route. Minimal rotating machinery adjacent to route and ALL fully guarded. Trained Guides keep children within designated route. Children are personally supervised at all times.	2		B		None.
GE2.1.6	Falls from height	9	No open drops. Fixed permanent barriers in place with wire netting attached. Designated route is at a safe distance from any drops. Trained Guides keep children within designated route at all times. Children are personally supervised at all times.	1		B		None.

Note: Severity categories, likelihood categories and their corresponding risk categories from HS/GN-001

Deeside CCGT Power Station

HAZARD SEVERITY CATEGORIES AND LIKELIHOOD CATEGORIES (TASK ASSESSMENTS)

Hazard ID No.	Potential Hazard	Hazard Severity	Protective Features/Safety Devices	Likelihood of Occurrence	Risk			Additional Protection / Recommendations
	Identify potential hazards from passive and maloperation	Category 1 to 9	Note protective devices or features present and their apparent state of repair (include warning signs)	Category 1 to 9	A	B	C	Note any simple additional protective measures which may be taken
GE2.1.7	Danger from abnormal plant conditions or emergencies.	9	Trained Guides gain permission from main control room prior to taking any groups out on plant. Radio contact to be maintained at all times with main control room. Guides aware of evacuation alarms and actions to take. Children personally supervised at all times. Hard Hats & Safety Glasses provided	2		B		None.
GE2.1.8	Danger from Fire or explosion	9	Guides aware of evacuation/fire alarms and actions to take. Fire certificate and risk assessments in place. Fixed fire fighting and detection systems in place with remote link to main control room. Children are personally supervised at all times.	2		B		None.
GE2.1.9	Danger to child from becoming detached from rest of group	9	Children are personally supervised at all times. Each party is accompanied by a minimum of two guides and is restricted to a minimum ratio of 1 adult to 10 children. Radio contact to be maintained at all times with main control room.	2		B		None.

Note: Severity categories, likelihood categories and their corresponding risk categories from HS/GN-001



Deeside CCGT Power Station

HAZARD SEVERITY CATEGORIES AND LIKELIHOOD CATEGORIES (TASK ASSESSMENTS)

Hazard ID No.	Potential Hazard	Hazard Severity	Protective Features/Safety Devices	Likelihood of Occurrence	Risk			Additional Protection / Recommendations
	Identify potential hazards from passive and maloperation	Category 1 to 9	Note protective devices or features present and their apparent state of repair (include warning signs)	Category 1 to 9	A	B	C	Note any simple additional protective measures which may be taken
GE2.1.10	Slips, trips and falls	4	Plant checked prior to visit by Lead Guide and Operations staff. Material available on plant for removing any oil spillage. Only stairways in main building are used. Children are instructed on safe use of stairways. One guide is at front and one at the rear of the group when using the stairways. Stairways on plant are not used as they are unsuitable for children. All Visitors are required to wear sensible shoes – A visible check by the guides is conducted prior to the tour.	3			C	None.
GE2.1.11	Drowning by falling into MCW Dock, Waste water pits, Energy Garden water features.	9	Plant fixtures and fitting securely attached. No access allowed within area of working cranes. No visits allowed on site during periods of high activity – Outages etc. Trained Guides gain permission from main control room prior to taking any groups out on plant. Radio contact maintained at all times with main control room. Constant supervision during visits to Energy Garden, shallow water only, water features barred off.	1		B		None.

Note: Severity categories, likelihood categories and their corresponding risk categories from HS/GN-001

Deeside CCGT Power Station

HAZARD SEVERITY CATEGORIES AND LIKELIHOOD CATEGORIES (TASK ASSESSMENTS)

Hazard ID No.	Potential Hazard	Hazard Severity	Protective Features/Safety Devices	Likelihood of Occurrence	Risk			Additional Protection / Recommendations
	Identify potential hazards from passive and maloperation	Category 1 to 9	Note protective devices or features present and their apparent state of repair (include warning signs)	Category 1 to 9	A	B	C	Note any simple additional protective measures which may be taken
GE2.1.12	Danger from falling objects	9	Plant fixtures and fitting securely attached. No access allowed within area of working cranes. No visits allowed on site during periods of high activity – Outages etc. Trained Guides gain permission from main control room prior to taking any groups out on plant. Radio contact maintained at all times with main control room.	1		B		None.
GE2.1.13	Electro-magnetic radiation	2	Electromagnetic survey carried out in 1995 by NRPB. No evidence found of harmful levels of radiation.	2			C	None.
GE2.1.14	Danger from access to chemicals	7	All chemicals stored in tanks within bunded areas away from designated routes. Trained Guides keep children within designated route at all times. Children are personally supervised at all times. Procedures in place to prevent access into chemical unloading areas.	1			C	None.

Note: Severity categories, likelihood categories and their corresponding risk categories from HS/GN-001

Deeside CCGT Power Station

HAZARD SEVERITY CATEGORIES AND LIKELIHOOD CATEGORIES (TASK ASSESSMENTS)

Hazard ID No.	Potential Hazard	Hazard Severity	Protective Features/Safety Devices	Likelihood of Occurrence	Risk			Additional Protection / Recommendations
	Identify potential hazards from passive and maloperation	Category 1 to 9	Note protective devices or features present and their apparent state of repair (include warning signs)	Category 1 to 9	A	B	C	Note any simple additional protective measures which may be taken
GE2.1.15	Legionella from water droplets dispersed from cooling towers.	9	Entrance/exit from education centre is adjacent to cooling towers. The rest of the designated route is away from this area. Low likelihood of water droplets grounding in this area as cooling tower fans draw air into the tower and dispersal is through the fan bell-mouth into the atmosphere above the tower. Cooling towers also have high efficiency drift eliminators to minimise water droplets in plume. Time spent in this area will be very low. Weekly analysis is carried out on cooling towers to determine levels of bacteria and monthly analysis is carried out for Legionella. Chemical dosing regime is in place to minimise biological growth. Energy Garden included in legionella risk assessment and control programme.	2		B		None.
GE2.1.16	Scolding of hands from hot water taps in Resource building toilets. The hot water is kept above 50 C for control of bacteria.	6	Mixer taps fitted to minimise the hazard.	4		B		None.

Note: Severity categories, likelihood categories and their corresponding risk categories from HS/GN-001