The Drax Power (Generating Stations) Order

Land at, and in the vicinity of, Drax Power Station, near Selby, North Yorkshire

Environmental Statement
Appendix 16.4 - Operation and Maintenance – Environmental Risk Record

The Planning Act 2008
The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5(2)(a)

Drax Power Limited

Drax Repower Project

Applicant: DRAX POWER LIMITED
Date: May 2018
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6.2.16.4 Environmental Statement – Volume 2 - Appendix 16.4 Operation and Maintenance – Environmental Risk Record

Gas Pipeline (Including Gas Receiving Facility & Above Ground Installation) Operation

ID	Risk Event (high level)	Proposed Scheme Aspect	Phase (C=Construction, O=Operational, M=Maintenance)	Hazard Description	Hazard sources and/or pathways	Documentation in which the event is/will be addressed	Reasonable worst consequence if event did occur	Air quality	Climate	Biodiversity	Electromagnetic interference	Health – See Cumulative Effects	Historic environment	Ground conditions	Landscape and visual	Major accidents and disasters	Socio-economics	Noise and vibration	Transport	Waste	Water resources, quality and hydrology	Embedded mitigation	Could this constitute a major accident or disaster?	Justification	Is this ALARP with existing mitigation?	Clarification
O 34	Collapse / damage to structures	Minimum Offtake Connection (MOC) and associated PTLS	O	Flooding	Watercourses unable to cope with high levels of precipitation and runoff.	Pipeline Safety Report Flood Risk Assessment	Loss of gas supply to site leading to gas fired generators shutting down.		X	X							X				X	See indicated relevant ES Chapters in columns to left	N	The reasonable worst consequence of this event does not meet the criteria of a major accident. The only potential receptors of harm is the electrical equipment.		ALARP not considered as does not meet the criteria of a major accident

C5	Extreme weather (flood)	Gas Pipeline	C,M, O	Unknown conditions about watercourses where it will be diverted or additional infrastructure to be installed	Flood due to incorrect design	Flood Risk Assessment CDM Register	Flooding affecting neighbouring property.		X	X			X	X		X	X				X	See indicated relevant ES Chapters in columns to left	Y	Could cause damage to infrastructure and the built environment.	Y	Will be addressed within the Pipeline Pre-construction and Pre-Operation Safety Reports.
C13	Fire and / or explosion or release of harmful gas	Gas Pipeline	C,M, O	Ground subsidence leading to loss of containment.	Release of flammable gas from pipeline	CDM register Method Statements	Fire and/or explosion affects neighbouring property and/or those people in the immediate area.		X	X			X		X	X	X					See indicated relevant ES Chapters in columns to left	Y	Could cause loss of life or permanent injury. Could cause damage to infrastructure and the built environment.	Y	Will be addressed within the Pipeline Pre-construction and Pre-Operation Safety Reports.
C20	Fire and / or explosion or release of harmful gas	Gas Pipeline	C,M, O	New critical infrastructure	Terrorism	National Risk Register Security Vulnerability assessment	Multiple injuries including fatalities.			X			X	X	X	X	X					See indicated relevant ES Chapters in columns to left	Y	Could cause loss of life or permanent injury.	Y	Will be addressed within the Pipeline Pre-construction and Pre-Operation Safety Reports.

O 27	Fire and / or explosion or release of harmful gas	Area I - Gas Receiving Facility (GRF) and Pig Trap Launching	O	Vehicle striking facility and associated gas containing equipment	Traffic	Workplace Transportation Risk Assessment	Fire and/or explosion affects neighbouring property and/or those people in the immediate area.								X	X	X	X			See indicated relevant ES Chapters in columns to left	Y	Could cause loss of life or permanent injury.	Y	Will be addressed within the Pipeline Pre-construction and Pre-Operation Safety Reports.
O 28	Fire and / or explosion or release of harmful gas	Area I - Gas Receiving Facility - Pressure	O	Failure of gas manifolds or connections	Natural gas.	Pipeline Safety Report Planned inspections and maintenance assessment	Fire and/or explosion affects neighbouring property and/or those people in the immediate area.								X	X	X	X			See indicated relevant ES Chapters in columns to left	Y	Could cause loss of life or permanent injury.	Y	Will be addressed within the Pipeline Pre-Operation Safety Reports.
O 29	Fire and / or explosion or release of harmful gas	Area I - Gas Receiving Facility - Pressure Reduction and metering station - Pig Trap	O	Flooding	Watercourses unable to cope with high levels of precipitation and runoff.	Flood Risk AssessmentPipeline Safety Report	Loss of gas supply to site leading to gas fired generators shutting down.									X				X	See indicated relevant ES Chapters in columns to left	N	The reasonable worst consequence of this event does not meet the criteria of a major accident. The only potential receptors of harm is the electrical equipment.		ALARP not considered as does not meet the criteria of a major accident

O 30	Fire and / or explosion or release of harmful gas	Area I - Pig Trap Launching Station	O	Incorrect operation of equipment	Natural gas.	Pipeline Safety Report	Fire and/or explosion affects neighbouring property and/or those people in the immediate area.								X	X		X			See indicated relevant ES Chapters in columns to left	Y	Could cause loss of life or permanent injury.	Y	Will be addressed within the Pipeline Pre-Operation Safety Reports.
O 31	Fire and / or explosion or release of harmful gas	Connection to NTS - PTLS	O	Incorrect operation of equipment	Natural gas.	Pipeline Safety Report	Fire and/or explosion affects neighbouring property and/or those people in the immediate area.								X	X					See indicated relevant ES Chapters in columns to left	Y	Could cause loss of life or permanent injury.	Y	Will be addressed within the Pipeline Pre-Operation Safety Reports.
O 35	Fire and / or explosion or release of harmful gas	Gas Pipeline - MOC to GRF	O	Pipeline strike due to agricultural activities above the pipeline (e.g. deep ploughing and the planting of trees)	Deep ploughing and the planting of trees	Pipeline Safety Report	Fire and/or explosion affects neighbouring property and/or those people in the immediate area.						X			X	X				See indicated relevant ES Chapters in columns to left.	Y	Could cause loss of life or permanent injury.	Y	Will be addressed within the Pipeline Pre-Operation Safety Reports.
O 36	Fire and / or explosion or release of harmful gas	Buried Gas Pipeline - MOC to	O	Failure due to corrosion	Moisture/water	Pipeline Safety Report Planned inspections and maintenance assessment	Fire and/or explosion affects neighbouring property and/or those people in the immediate area.						X				X				See indicated relevant ES Chapters in columns to left.	Y	Could cause loss of life or permanent injury.	Y	Will be addressed within the Pipeline Pre-Operation

																									Safety Reports.
M 6	Harm to people	Gas Pipeline	M,O	Access to maintainable equipment such as national grid offtake connection, gas receiving facility and pig launching/receiving traps. Route wide for maintenance, emergency vehicles	Presence of pests, livestock, agricultural machinery, uneven ground and hazardous substances (e.g. crop sprays).	CDM register	Injury to a member of DPL and/or contractors			X		X	X	X			X					See indicated relevant ES Chapters in columns to left	N	The reasonable worst consequence of this event does not meet the criteria of a major accident. The only potential receptors of harm are maintenance workers.		Will be addressed within the Pipeline Pre-Operation and final Safety Reports.
C12	Harm to people	Gas Pipeline	C,M, O	Maintenance of pipeline equipment	Contaminants and organisms harmful to human health. Traffic. Contami	CDM register Method Statements	Death and/or injury to maintenance workers.						X		X					See indicated relevant ES Chapters in columns to left	N	The reasonable worst consequence of this event does not meet the criteria of a major accident. The only potential		ALARP not considered as does not meet the criteria of a major accident

					nated land																			receptors of harm are maintenance workers.		
C21	Harm to people	Gas Pipeline	C,M, O	Impact from construction activities alongside watercourses and flood zone 3	Flooding Excavations	CDM register	Harm to small number of construction / maintenance workers.													X	See indicated relevant ES Chapters in columns to left	N	The reasonable worst consequence of this event does not meet the criteria of a major accident. The only potential receptors of harm are construction workers.		ALARP not considered as does not meet the criteria of a major accident
C22	Harm to people	Connection to National Grid	C,M, O	Connection into existing National Grid pipeline. - Construction activities	Natural gas.	CDM register	Fire and/or explosion affects neighbouring property and/or those people in the immediate area.									X					See indicated relevant ES Chapters in columns to left	N	The reasonable worst consequence of this event does not meet the criteria of a major accident. The only potential receptors of harm are		ALARP not considered as does not meet the criteria of a major accident

																									construction workers.		
C26	Harm to people	Area I - Gas Receiving Facility	C,M,O	Over-Head HV power lines cross the route of the pipeline at the GRF and compressor.	HV electricity	CDM register Method Statements	Death and/or injury to construction / maintenance workers.															See indicated relevant ES Chapters in columns to left	N	The reasonable worst consequence of this event does not meet the criteria of a major accident. The only potential receptors of harm are construction /maintenance workers.		ALARP not considered as does not meet the criteria of a major accident
O32	Harm to people	Connection to NTS - PTLS	O	Failure of gas manifolds or connections	Natural gas.	Pipeline Safety Report	Fire and/or explosion affects neighbouring property and/or those people in the immediate area.					X			X	X					See indicated relevant ES Chapters in columns to left	Y	Could cause loss of life or permanent injury.	Y	Will be addressed within the Pipeline Pre-Operation Safety Reports.

O 33	Harm to people	Minimum Offtake Connection (MOC)	O	Failure of gas manifolds or connections	Natural gas.	Responsibility of National Grid	Fire and/or explosion affects neighbouring property and/or those people in the immediate area.						X			X	X					See indicated relevant ES Chapters in columns to left	Y	Could cause loss of life or permanent injury.	Y	Will be addressed within the Pipeline Pre-Operation Safety Reports.
O 37	Harm to people	Above ground sections of Gas Pipeline - MOC	O	Damage due to vandalism	People	Security Vulnerability assessment	Fire and/or explosion affects neighbouring property and/or those people in the immediate area.						X			X	X		X			See indicated relevant ES Chapters in columns to left	Y	Could cause loss of life or permanent injury.	Y	Will be addressed within the Pipeline Pre-Operation Safety Reports.
O 38	Harm to people	GRF, PTLS and MOC	O	Damage due to vandalism	People	Security Vulnerability assessment	Fire and/or explosion affects neighbouring property and/or those people in the immediate area.						X			X	X		X			See indicated relevant ES Chapters in columns to left.	Y	Could cause loss of life or permanent injury.	Y	Will be addressed within the Pipeline Pre-Operation Safety Reports.
C1 5	Overload of utilities	Gas Pipeline	C,O	New power and water supplies	Insufficient utilities supply level.	Design Concept Report CDM Register	Loss of power in surrounding area.				X				X		X					See indicated relevant ES Chapters in columns to left	N	Pre-planned installation approved by National Grid. Unlikely to cause community wide power outage or damage to infrastructure		ALARP not considered as does not meet the criteria of a major accident

																									which could cause a MA&D.		
C8	Physical damage or contamination of aquifer or borehole	Gas Pipeline	C,M, O	Unknown water abstraction points (e.g. Farm owned, disused industrial use) are close to pipeline - potential contamination of aquifer	Construction through existing contaminated sites and presence of water abstraction boreholes along route	CDM register	Loss of drinking water supply			X		X		X		X	X				X	See indicated relevant ES Chapters in columns to left	Y	Long lasting damage to an environmental receptor.		Will be addressed within the Pipeline Pre-construction and Pre-Operation Safety Reports.

Power Station Site Changes – Operation of Units X & Y and Battery Storage Facility

ID	Risk Event (high level)	Proposed Scheme Aspect	Phase (C = Construction, O = Operational, M =	Hazard Description	Hazard sources and/or pathways	Documentation in which the event is/will be addressed	Reasonable worst consequence if event did occur	Air quality	Climate	Biodiversity	Electromagnetic interference	Health – See Cumulative effects	Historic environment	Ground conditions	Landscape and visual	Major accidents and disasters	Socio-economics	Noise and vibration	Transport	Waste	Water resources, quality and hydrology	Embedded mitigation	Could this constitute a major accident or disaster?	Justification	Is this ALARP with existing mitigation?	Clarification
O28	Extreme weather (wind)	Power Station Site Changes	O	Collapse of stacks during adverse weather conditions.	High Winds	Stack design scope of work	Structural damage to stack															See indicated relevant ES Chapters in columns to left	N	The reasonable worst consequence of this event does not meet the criteria of a major accident.		ALARP not considered as does not meet the criteria of a major accident

ID	Risk Event (high level)	Proposed Scheme Aspect	Phase (C = Construction, O = Operational, M =	Hazard Description	Hazard sources and/or pathways	Documentation in which the event is/will be addressed	Reasonable worst consequence if event did occur	Air quality	Climate	Biodiversity	Electromagnetic interference	Health – See Cumulative effects	Historic environment	Ground conditions	Landscape and visual	Major accidents and disasters	Socio-economics	Noise and vibration	Transport	Waste	Water resources, quality and hydrology	Embedded mitigation	Could this constitute a major accident or disaster?	Justification	Is this ALARP with existing mitigation?	Clarification
C7	Fire and / or explosion or release of harmful gas	Operating Unit X and constructing Unit Y	C, M, O	Ground subsidence leading to loss of containment.	Release of flammable gas from pipeline	CDM register Safe Systems of Work	Fire and/or explosion affects neighbouring plant, equipment and/or those people in the immediate area.	X														See indicated relevant ES Chapters in columns to left	N	The reasonable worst consequence of this event does not meet the criteria of a major accident. The only potential receptors of harm are construction , operations and maintenance workers.		ALARP not considered as does not meet the criteria of a major accident

ID	Risk Event (high level)	Proposed Scheme Aspect	Phase (C = Construction, O = Operational, M =	Hazard Description	Hazard sources and/or pathways	Documentation in which the event is/will be addressed	Reasonable worst consequence if event did occur	Air quality	Climate	Biodiversity	Electromagnetic interference	Health – See Cumulative effects	Historic environment	Ground conditions	Landscape and visual	Major accidents and disasters	Socio-economics	Noise and vibration	Transport	Waste	Water resources, quality and hydrology	Embedded mitigation	Could this constitute a major accident or disaster?	Justification	Is this ALARP with existing mitigation?	Clarification
M 11	Fire and / or explosion or release of harmful gas	Power Station Site Changes	M , O	New critical infrastructure	Terrorism	CDM register	Multiple injuries including fatalities.			X			X	X	X	X	X					See indicated relevant ES Chapters in columns to left	Y	Could cause loss of life or permanent injury.	Y	Addressed as part of the Construction phase H&S plan. Site MAPP
O29	Fire and / or explosion or release of harmful gas	Power Station Site Changes	O	Vehicle collision with above ground natural gas pipework.	Release of flammable gas from pipeline.	Unit X & Y Hazard Studies Site workplace vehicle risk assessment	Fire and/or explosion affects plant and DPL personnel in the immediate area.	X		X						X	X		X			See indicated relevant ES Chapters in columns to left	N	The reasonable worst consequence of this event does not meet the criteria of a major accident. The only		ALARP not considered as does not meet the criteria of a major accident

ID	Risk Event (high level)	Proposed Scheme Aspect	Phase (C = Construction, O = Operational, M =	Hazard Description	Hazard sources and/or pathways	Documentation in which the event is/will be addressed	Reasonable worst consequence if event did occur	Air quality	Climate	Biodiversity	Electromagnetic interference	Health – See Cumulative effects	Historic environment	Ground conditions	Landscape and visual	Major accidents and disasters	Socio-economics	Noise and vibration	Transport	Waste	Water resources, quality and hydrology	Embedded mitigation	Could this constitute a major accident or disaster?	Justification	Is this ALARP with existing mitigation?	Clarification
																							potential receptors of harm are DPL workers.		

ID	Risk Event (high level)	Proposed Scheme Aspect	Phase (C = Construction, O = Operational, M =	Hazard Description	Hazard sources and/or pathways	Documentation in which the event is/will be addressed	Reasonable worst consequence if event did occur	Air quality	Climate	Biodiversity	Electromagnetic interference	Health – See Cumulative effects	Historic environment	Ground conditions	Landscape and visual	Major accidents and disasters	Socio-economics	Noise and vibration	Transport	Waste	Water resources, quality and hydrology	Embedded mitigation	Could this constitute a major accident or disaster?	Justification	Is this ALARP with existing mitigation?	Clarification
O30	Fire and / or explosion or release of harmful gas	Power Station Site Changes	O	Failure of the gas manifolds or pipelines to the individual gas turbines.	Release of flammable gas from pipeline.	Unit X & Y Hazard Studies Dangerous Substances and Explosive Atmospheres Study Site MAPP	Fire and/or explosion affects plant and DPL personnel in the immediate area.	X		X						X	X					See indicated relevant ES Chapters in columns to left	N	The reasonable worst consequence of this event does not meet the criteria of a major accident. The only potential receptors of harm are DPL workers.		ALARP not considered as does not meet the criteria of a major accident

ID	Risk Event (high level)	Proposed Scheme Aspect	Phase (C = Construction, O = Operational, M =	Hazard Description	Hazard sources and/or pathways	Documentation in which the event is/will be addressed	Reasonable worst consequence if event did occur	Air quality	Climate	Biodiversity	Electromagnetic interference	Health – See Cumulative effects	Historic environment	Ground conditions	Landscape and visual	Major accidents and disasters	Socio-economics	Noise and vibration	Transport	Waste	Water resources, quality and hydrology	Embedded mitigation	Could this constitute a major accident or disaster?	Justification	Is this ALARP with existing mitigation?	Clarification
O31	Fire and / or explosion or release of harmful gas	Power Station Site Changes	O	Failure of the gas turbines.	Release of flammable gas from gas turbines.	Unit X & Y Hazard Studies Dangerous Substances and Explosive Atmospheres Study Site MAPP	Fire and/or explosion affects plant and DPL personnel in the immediate area.	X		X						X	X					See indicated relevant ES Chapters in columns to left	N	The reasonable worst consequence of this event does not meet the criteria of a major accident. The only potential receptors of harm are DPL workers.		ALARP not considered as does not meet the criteria of a major accident

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C33	Harm to ecological receptors	Power Station Site Changes	C, M, O	Materials and equipment	Release of contaminants	Flood Risk Assessment CDM register CEMP	Reversible on site soil contamination			X				X		X					X	See indicated relevant ES Chapters in columns to left	Y	Could cause damage to the environment.	Y	Addressed as part of the CEMP
C6	Harm to people	Operating Unit X and constructing Unit Y	C, M, O	Maintenance of Unit X services and equipment in proximity to construction routes and area related to Unit Y	Construction vehicles moving around site.	CDM register Site Workplace Vehicle risk assessment	Death and/or injury to maintenance workers.											X				See indicated relevant ES Chapters in columns to left	N	The reasonable worst consequence of this event does not meet the criteria of a major accident. The only potential receptors of		ALARP not considered as does not meet the criteria of a major accident

ID	Risk Event (high level)	Proposed Scheme Aspect	Phase (C = Construction, O = Operational, M =	Hazard Description	Hazard sources and/or pathways	Documentation in which the event is/will be addressed	Reasonable worst consequence if event did occur	Air quality	Climate	Biodiversity	Electromagnetic interference	Health – See Cumulative effects	Historic environment	Ground conditions	Landscape and visual	Major accidents and disasters	Socio-economics	Noise and vibration	Transport	Waste	Water resources, quality and hydrology	Embedded mitigation	Could this constitute a major accident or disaster?	Justification	Is this ALARP with existing mitigation?	Clarification
																							harm are maintenance workers.		

ID	Risk Event (high level)	Proposed Scheme Aspect	Phase (C = Construction, O = Operational, M =	Hazard Description	Hazard sources and/or pathways	Documentation in which the event is/will be addressed	Reasonable worst consequence if event did occur	Air quality	Climate	Biodiversity	Electromagnetic interference	Health – See Cumulative effects	Historic environment	Ground conditions	Landscape and visual	Major accidents and disasters	Socio-economics	Noise and vibration	Transport	Waste	Water resources, quality and hydrology	Embedded mitigation	Could this constitute a major accident or disaster?	Justification	Is this ALARP with existing mitigation?	Clarification
C8	Overload of utilities	Power Station Site Changes	C, O	New power and water supplies	Insufficient utilities supply level	Design Concept Report CDM register	Loss of power to site operations.															See indicated relevant ES Chapters in columns to left	N	The reasonable worst consequence of this event does not meet the criteria of a major accident. Unlikely to cause community wide power outage or damage to infrastructure which could cause a MA&D.		ALARP not considered as does not meet the criteria of a major accident

Gas Pipeline – Maintenance

ID	Risk Event (high level)	Proposed Scheme Aspect	Phase (C=Construction, O=Operational, M=Maintenance)	Hazard Description	Hazard sources and/or pathways	Documentation in which the event is/will be addressed	Reasonable worst consequence if event did occur	Air quality	Climate	Biodiversity	Electromagnetic interference	Health – See Cumulative effects	Historic environment	Ground conditions	Landscape and visual	Major accidents and disasters	Socio-economics	Noise and vibration	Transport	Waste	Water resources, quality and hydrology	Embedded mitigation	Could this constitute a major accident or disaster?	Justification	Is this ALARP with existing mitigation?	Clarification
C5	Extreme weather (flood)	Gas Pipeline	C,M, O	Unknown conditions about watercourses where it will be diverted or additional infrastructure to be installed	Flood due to incorrect design	Flood Risk Assessment CDM Register	Flooding affecting neighbouring property.		X	X			X	X		X	X				X	See indicated relevant ES Chapters in columns to left	Y	Could cause damage to infrastructure and the built environment.	Y	Will be addressed within the Pipeline Pre-construction and Pre-Operation Safety Reports.
C13	Fire and / or explosion or release of harmful gas	Gas Pipeline	C,M, O	Ground subsidence leading to loss of containment.	Release of flammable gas from pipeline	CDM register Method Statements	Fire and/or explosion affects neighbouring property and/or those people in the immediate area.		X	X			X		X	X	X					See indicated relevant ES Chapters in columns to left	Y	Could cause loss of life or permanent injury. Could cause damage to infrastructure and the	Y	Will be addressed within the Pipeline Pre-construction and Pre-Operation

ID	Risk Event (high level)	Proposed Scheme Aspect	Phase (C=Construction, O=Operational, M=Maintenance)	Hazard Description	Hazard sources and/or pathways	Documentation in which the event is/will be addressed	Reasonable worst consequence if event did occur	Air quality	Climate	Biodiversity	Electromagnetic interference	Health – See Cumulative effects	Historic environment	Ground conditions	Landscape and visual	Major accidents and disasters	Socio-economics	Noise and vibration	Transport	Waste	Water resources, quality and hydrology	Embedded mitigation	Could this constitute a major accident or disaster?	Justification	Is this ALARP with existing mitigation?	Clarification
																								built environment.		Safety Reports.
C20	Fire and / or explosion or release of harmful gas	Gas Pipeline	C,M, O	New critical infrastructure	Terrorism	National Risk Register Security Vulnerability assessment	Multiple injuries including fatalities.			X			X	X	X	X	X						See indicated relevant ES Chapters in columns to left	Y	Could cause loss of life or permanent injury.	Y	Will be addressed within the Pipeline Pre-construction and Pre-Operation Safety Reports.

ID	Risk Event (high level)	Proposed Scheme Aspect	Phase (C=Construction, O=Operational, M=Maintenance)	Hazard Description	Hazard sources and/or pathways	Documentation in which the event is/will be addressed	Reasonable worst consequence if event did occur	Air quality	Climate	Biodiversity	Electromagnetic interference	Health – See Cumulative effects	Historic environment	Ground conditions	Landscape and visual	Major accidents and disasters	Socio-economics	Noise and vibration	Transport	Waste	Water resources, quality and hydrology	Embedded mitigation	Could this constitute a major accident or disaster?	Justification	Is this ALARP with existing mitigation?	Clarification
M 39	Fire and / or explosion or release of harmful gas	Vent Stack at GRF	M	Small quantities of gas deliberately released via the vent stack	Natural gas.	Pipeline Safety Report	Nuisance complaints only.										X					See indicated relevant ES Chapters in columns to left	N	The reasonable worst consequence of this event does not meet the criteria of a major accident.		ALARP not considered as does not meet the criteria of a major accident
M 6	Harm to people	Gas Pipeline	M,O	Access to maintainable equipment such as national grid offtake connection, gas receiving facility and pig launching/receiving	Presence of pests, livestock, agricultural machinery , uneven ground and hazardous substances (e.g.	CDM register	Injury to a member of DPL and/or contractors			X		X	X	X			X					See indicated relevant ES Chapters in columns to left	N	The reasonable worst consequence of this event does not meet the criteria of a major accident. The only potential receptors of harm are		Will be addressed within the Pipeline Pre-Operation and final Safety Reports.

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				traps. Route wide for maintenance, emergency vehicles	crop sprays).																			maintenance workers.		
C12	Harm to people	Gas Pipeline	C,M, O	Maintenance of pipeline equipment	Contaminants and organisms harmful to human health. Traffic. Contaminated land	CDM register Method Statements	Death and/or injury to maintenance workers.							X		X						See indicated relevant ES Chapters in columns to left	N	The reasonable worst consequence of this event does not meet the criteria of a major accident. The only potential		ALARP not considered as does not meet the criteria of a major accident

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																								receptors of harm are maintenance workers.		
C21	Harm to people	Gas Pipeline	C,M, O	Impact from construction activities alongside watercourses and flood zone 3	Flooding Excavations	CDM register	Harm to small number of construction / maintenance workers.													X	See indicated relevant ES Chapters in columns to left	N	The reasonable worst consequence of this event does not meet the criteria of a major accident. The only potential		ALARP not considered as does not meet the criteria of a major accident

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																								receptors of harm are construction workers.		
C22	Harm to people	Connection to National Grid	C,M, O	Connection into existing National Grid pipeline. - Construction activities	Natural gas.	CDM register	Fire and/or explosion affects neighbouring property and/or those people in the immediate area.										X					See indicated relevant ES Chapters in columns to left	N	The reasonable worst consequence of this event does not meet the criteria of a major accident. The only potential		ALARP not considered as does not meet the criteria of a major accident

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																								receptors of harm are construction workers.		
C26	Harm to people	Area I - Gas Receiving Facility	C,M,O	Over-Head HV power lines cross the route of the pipeline at the GRF and compressor.	HV electricity	CDM register Method Statements	Death and/or injury to construction / maintenance workers.															See indicated relevant ES Chapters in columns to left	N	The reasonable worst consequence of this event does not meet the criteria of a major accident. The only potential		ALARP not considered as does not meet the criteria of a major accident

ID	Risk Event (high level)	Proposed Scheme Aspect	Phase (C=Construction, O=Operational, M=Maintenance)	Hazard Description	Hazard sources and/or pathways	Documentation in which the event is/will be addressed	Reasonable worst consequence if event did occur	Air quality	Climate	Biodiversity	Electromagnetic interference	Health – See Cumulative effects	Historic environment	Ground conditions	Landscape and visual	Major accidents and disasters	Socio-economics	Noise and vibration	Transport	Waste	Water resources, quality and hydrology	Embedded mitigation	Could this constitute a major accident or disaster?	Justification	Is this ALARP with existing mitigation?	Clarification
																								receptors of harm are construction /maintenance workers.		
C8	Physical damage or contamination of aquifer or borehole	Gas Pipeline	C,M, O	Unknown water abstraction points (e.g. Farm owned, disused industrial use) are close to pipeline - potential	Construction through existing contaminated sites and presence of water abstraction borehole	CDM register	Loss of drinking water supply			X		X		X		X	X				X	See indicated relevant ES Chapters in columns to left	Y	Long lasting damage to an environmental receptor.		Will be addressed within the Pipeline Pre-construction and Pre-Operation Safety Reports.

ID	Risk Event (high level)	Proposed Scheme Aspect	Phase (C=Construction, O=Operational, M=Maintenance)	Hazard Description	Hazard sources and/or pathways	Documentation in which the event is/will be addressed	Reasonable worst consequence if event did occur	Air quality	Climate	Biodiversity	Electromagnetic interference	Health – See Cumulative effects	Historic environment	Ground conditions	Landscape and visual	Major accidents and disasters	Socio-economics	Noise and vibration	Transport	Waste	Water resources, quality and hydrology	Embedded mitigation	Could this constitute a major accident or disaster?	Justification	Is this ALARP with existing mitigation?	Clarification
				contamination of aquifer	s along route																				

Power Station Site Changes – Maintenance

ID	Risk Event (high level)	Proposed Scheme Aspect	Phase (C = Construction, O = Operational, M = Maintenance)	Hazard Description	Hazard sources and/or pathways	Documentation in which the event is/will be addressed	Reasonable worst consequence if event did occur	Air quality	Climate	Biodiversity	Electromagnetic interference	Health – See Cumulative effects	Historic environment	Ground conditions	Landscape and visual	Major accidents and disasters	Socio-economics	Noise and vibration	Transport	Waste	Water resources, quality and hydrology	Embedded mitigation	Could this constitute a major accident or disaster?	Justification	Is this ALARP with existing mitigation?	Clarification
C7	Fire and / or explosion or release of harmful gas	Operating Unit X and constructing Unit Y	C,M, O	Ground subsidence leading to loss of containment.	Release of flammable gas from pipeline	CDM register Safe Systems of Work	Fire and/or explosion affects neighbouring plant, equipment and/or those people in the immediate area.	X														See indicated relevant ES Chapters in columns to left	N	The reasonable worst consequence of this event does not meet the criteria of a major accident. The only potential receptors of harm are construction , operations and maintenance workers.		ALARP not considered as does not meet the criteria of a major accident

ID	Risk Event (high level)	Proposed Scheme Aspect	Phase (C = Construction, O = Operational, M = Maintenance)	Hazard Description	Hazard sources and/or pathways	Documentation in which the event is/will be addressed	Reasonable worst consequence if event did occur	Air quality	Climate	Biodiversity	Electromagnetic interference	Health – See Cumulative effects	Historic environment	Ground conditions	Landscape and visual	Major accidents and disasters	Socio-economics	Noise and vibration	Transport	Waste	Water resources, quality and hydrology	Embedded mitigation	Could this constitute a major accident or disaster?	Justification	Is this ALARP with existing mitigation?	Clarification
M 11	Fire and / or explosion or release of harmful gas	Power Station Site Changes	M, O	New critical infrastructure	Terrorism	CDM register	Multiple injuries including fatalities.			X			X	X	X	X	X					See indicated relevant ES Chapters in columns to left	Y	Could cause loss of life or permanent injury.	Y	Addressed as part of the Construction phase H&S plan. Site MAPP
M 32	Fire and / or explosion or release of harmful gas	Power Station Site Changes	M	Natural gas release from vent stack	Release of flammable gas from vent stack.	Unit X & Y Hazard Studies Dangerous Substances and Explosive Atmospheres Study Site MAPP	Fire and/or explosion affects plant and DPL personnel in the immediate area.	X		X						X	X					See indicated relevant ES Chapters in columns to left	N	The reasonable worst consequence of this event does not meet the criteria of a major accident. The only potential receptors of harm are		ALARP not considered as does not meet the criteria of a major accident

ID	Risk Event (high level)	Proposed Scheme Aspect	Phase (C = Construction, O = Operational, M = Maintenance)	Hazard Description	Hazard sources and/or pathways	Documentation in which the event is/will be addressed	Reasonable worst consequence if event did occur	Air quality	Climate	Biodiversity	Electromagnetic interference	Health – See Cumulative effects	Historic environment	Ground conditions	Landscape and visual	Major accidents and disasters	Socio-economics	Noise and vibration	Transport	Waste	Water resources, quality and hydrology	Embedded mitigation	Could this constitute a major accident or disaster?	Justification	Is this ALARP with existing mitigation?	Clarification
																							DPL workers.		
C33	Harm to ecological receptors	Power Station Site Changes	C,M, O	Materials and equipment	Release of contaminants	Flood Risk Assessment CDM register CEMP	Reversible on site soil contamination			X				X		X					X	See indicated relevant ES Chapters in columns to left	Y	Could cause damage to the environment.	Y	Addressed as part of the CEMP

ID	Risk Event (high level)	Proposed Scheme Aspect	Phase (C = Construction, O = Operational, M = Maintenance)	Hazard Description	Hazard sources and/or pathways	Documentation in which the event is/will be addressed	Reasonable worst consequence if event did occur	Air quality	Climate	Biodiversity	Electromagnetic interference	Health – See Cumulative effects	Historic environment	Ground conditions	Landscape and visual	Major accidents and disasters	Socio-economics	Noise and vibration	Transport	Waste	Water resources, quality and hydrology	Embedded mitigation	Could this constitute a major accident or disaster?	Justification	Is this ALARP with existing mitigation?	Clarification
C6	Harm to people	Operating Unit X and constructing Unit Y	C,M, O	Maintenance of Unit X services and equipment in proximity to construction routes and area related to Unit Y	Construction vehicles moving around site.	CDM register Site Workplace Vehicle risk assessment	Death and/or injury to maintenance workers.												X			See indicated relevant ES Chapters in columns to left	N	The reasonable worst consequence of this event does not meet the criteria of a major accident. The only potential receptors of harm are maintenance workers.		ALARP not considered as does not meet the criteria of a major accident