Hinkley Point C

Health, Safety & Environmental Standard



Contents

This HS&E Standard

Foreword
EDF Energy Health, Safety, Environment and Quality Policy Statement 5
Project Overview
Purpose and Scope of Standard8

Management & Arrangements

Construction (Design & Management) Regulations 2007	10
Nuclear Site Licence	11
Environmental Permitting Requirements	12
Security Requirements	12
Regulatory Interface and Interactions	13
Permissions, Consents and Licensing	13
Competency	14
Pre-Qualification of Contractors	14
Occupational Health Arrangements	15
Health, Safety and Environmental Professionals	16
Drug & Alcohol Policy	16
Key Performance Indicators	17

17
18
18
18
19
19
20
20
20
21

Design

Design Organisations	24
EDF Energy's Expectations of Designers	25
Liaison with CDM Coordinator	27

Construction Site - Risk Management

Construction Phase Plan)
Environmental Management and Monitoring Plan	

Construction Environmental Management Plan	31
Risk Assessments & Method Statements	32
Point of Work Risk Assessments	33
Work Authorisation Process	33
Coordination of Work Faces	34
Emergency Arrangements	34
Incident Reporting and Investigation	35
Trend Analysis	35

Construction Site - Management Of Health, Safety & Environment

Personal Mobile Telephones / Radios / Audio Equipment	38
Smoking	38
Construction Plant	38
Personal Protective Equipment	39
Laydown Areas	40
Welfare Facilities	40
Hazardous Substances	40
Radioactive Materials and Ionising Radiation	40

Access to Site	41
Site Induction	41
Site Supervision	42
Trade / Skill Competencies	42
Toolbox Talks	42
Scaffolding and Working at Height	43
Lifting Operations	43
Site Transportation	44
Safety Inspections	44
Learning Reports	45
Site Health, Safety and Environment Committee	45
'Lessons Learned' Documentation	45
Hours Worked	45
Tagged Management	46
Removal of Workers from Site	46

Appendices

Appendix A - Hinkley C Mandatory Training For Critical Workers48	
Appendix B - Abbreviations53	

This HS&E Standard



Foreword

EDF Energy is planning to construct two 1650 MegaWatt pressurised water reactors (EPR[TM]) at Hinkley Point, near Bridgwater in Somerset. The proposed development site is located to the west of the existing Hinkley Point A and B nuclear power stations, and is designated Hinkley Point C (HPC).

Work on the HPC Project must be carried out safely and with a focus on high standards of quality and assurance, with workers encouraged to maintain a diligent and questioning attitude to their roles, drawing on past experiences.

EDF Energy is committed to achieving excellence in health, safety and environmental (HS&E) management, and our goal is to achieve 'Zero Harm' to people and the environment during the lifetime of the HPC Project and beyond.

Nuclear new build is different; what we construct today – and how we construct it – will affect the health, safety and environment of future generations.

The quality of construction relates directly to the integrity of the structures that we are building, and in turn our ability to operate a safe and harm-free nuclear facility.

Nigel Cann, Site Construction Director

EDF Energy Health, Safety, Environment and Quality Policy Statement

Safety and care for the environment are our overriding priorities and we are committed to achieving this through the excellence of our quality arrangements and by providing appropriate training to employees.

Safety, whether nuclear, radiological or conventional, and environmental considerations as well as sustainability are at the heart of everything we do and, throughout the project, will be:

- Taken into account in the design
- Correctly implemented on site ensuring the quality of construction
- Suitably tested during commissioning
- Adequately implemented during operation and maintenance throughout the operating lifetime of our power stations including the decommissioning period

We will apply the following key principles in of all our work activities:

- Every job will be done safely and in an environmentally sound manner, no matter how important or urgent it is
- Each of us has a personal responsibility for our own health and safety, for the impact our activities can have on safety and the environment, for those involved in our projects, and for those in the communities that we serve
- Putting people to work carries a specific responsibility and accountability for health and safety as well for protection of the environment, which will be visibly demonstrated
- We will learn from our experiences and those of others to prevent deficiencies, incidents, environmental damage and harm

NNB Generation Company Limited (Company number 06937084), part of EDF Energy, is the Company that will lead the new nuclear programme in the UK. For the purpose of this document, NNB Generation Limited is referred to as EDF Energy.

- Each of us will identify, report and protect against hazards and adverse conditions to help ensure the safety of our activities, a harm-free workplace and to limit the impact of our activities on the environment.
- The quality arrangements that comprise our integrated management system are based on requirements from legislation, international standards, the expectations of our key stakeholders, our Regulators and customers, industry good practice and knowledge and experience. Our knowledge of and adherence to these arrangements are key to our safe and environmentally sound performance

The objectives of this policy can only be achieved by the commitment of all members of Team NB to seeking the highest standards of performance in safety and environmental responsibility, to the continual improvement of quality arrangements and to applying these to all that we do.

I personally get involved in seeking to improve the implementation of this policy. Everyone in Team NB is responsible for enforcing this policy, will always have my support, and that of the management team, in ensuring that everything we do we will do safely.

This statement has been endorsed by the Board of Directors, and is binding on all of us.

Chen Bable

Chris Bakken Project Director, HPC

02/04/12

Humphrey Cadoux-Hudson Managing Director

Date



Project Overview

The proposed HPC power plants are based on replicating, as far as possible, the Flamanville 3 EPR[TM] plant which is currently under construction in Normandy, France. The HPC Project will represent the first new nuclear power plants constructed in the UK for a generation.

Although there are sections of the construction project which can be prefabricated off-site, the majority of the EPR construction will be 'stick-built', and will require a peak of around 5,600 workers on-site.

It is essential that any impact the construction activities have upon the local community is mitigated as far as possible. A temporary jetty is being constructed and an existing wharf refurbished to allow as many deliveries as possible to be made by sea. Over four million cubic metres of spoil will be excavated, stockpiled and re-used on-site. It will also be necessary to modify the local road infrastructure to facilitate deliveries of plant and material.

It is estimated that around half the workers employed on the project will come from outside the local area, and it will be necessary to create purpose-built accommodation for them. Again, EDF Energy is committed to mitigating the impacts of any associated development works relating to the HPC Project. There are a number of nature conservation designated sites close to the HPC development site. The Severn Estuary to the north is recognised for its international and national nature conservation importance, and the neighbouring fields contain a number of important, species-rich hedgerows and areas of woodland.

Throughout the construction phase and beyond, health, safety and environmental protection will remain our top priority.



Purpose and Scope of Standard

This standard sets out how EDF Energy will seek to achieve 'Zero Harm' throughout the HPC Project. It outlines the health, safety and environmental (HS&E) expectations for everyone involved with the construction and commissioning of the new EPR nuclear power plants at Hinkley Point, and the construction of necessary associated development works.

By working with our designers, contractors, suppliers and consultants we will aim to create a 'best-in-class' culture within our wider team, where injuries, ill-health and harm to the environment are identified, controlled and prevented. This will be achieved by not only complying with our legal requirements, but by systematically planning, assessing, monitoring and reviewing our activities, and learning from experiences on similar projects.

This standard has been written to reflect current best practice and as a minimum, current UK legislative requirements. It is complemented by a number of other EDF Energy policies, standards and procedures.

This standard will be subject to regular review and, where necessary, updated to ensure that the HPC Project achieves the highest possible standards in HS&E management.

All designers, contractors, suppliers and consultants working on the HPC Project shall:

- Ensure that they comply with the necessary statutory and regulatory requirements that apply to their activities;
- Ensure that they comply with the requirements set out in this standards document;
- Openly share details of opportunities for improving health, safety and environment across the project;
- Support innovation;
- Work cooperatively and collaboratively; and
- Be held accountable for adhering to this standard.



Management & Arrangements

Construction (Design & Management) Regulations 2007

Any construction works carried out as part of the HPC Project will fall under the Construction (Design & Management) (CDM) Regulations 2007. In accordance with these regulations, the following appointments have been made:

Client

NNB Gen Co (referred to as EDF Energy for the purposes of this document) will be the Client for the HPC Project, including the associated development works.

CDM Coordinator

NNB Gen Co (referred to as EDF Energy for the purposes of this document) will be the CDM Coordinator for the HPC Project, including the associated development works. A number of consultants with relevant experience in carrying out CDM coordination work on large complex projects have been recruited to help undertake this role, and will work as part of an integrated EDF Energy team.



Principal Contractors

NNB Gen Co (referred to as EDF Energy for the purposes of this document) will be the Principal Contractor for the construction works on the HPC development site, which will be executed on the Nuclear Licensed site.

There may be one or more other Principal Contractors appointed to execute the discrete packages of construction works that will comprise the Hinkley C associated development works.

Designers

There will be many different designers working on the HPC Project, involved in both permanent and temporary designs. All designers must comply with the requirements of the CDM Regulations in considering how their design impacts the health and safety of those responsible for construction, operation, maintenance and demolition.

Formal notification of the commencement of the construction activities has been submitted to the Health and Safety Executive (HSE), and regular monthly updates are provided.

Nuclear Site Licence

The primary legislation that defines the requirements associated with constructing and operating a nuclear power plant is the Nuclear Installation Act. Under the requirements of this Act, EDF Energy has obtained a Nuclear Site Licence.

The Nuclear Site Licence Conditions which apply to the construction and commissioning activities are:

- LC 2 Marking of site boundary
- LC 3 Restriction on dealing with the site
- LC 4 Restriction on Nuclear Matter on the site
- LC 5 Consignment of Nuclear Matter
- LC 6 Documents, records, authorities and certificates
- LC 7 Incidents on the site
- LC 8 Warning Notices
- LC 9 Instructions to persons on-site
- LC 10 Training
- LC 11 Emergency arrangements
- LC 12 Duly authorised and other suitably qualified and experienced persons
- LC 14 Safety documentation

- LC 17 Quality Assurance
- LC 18 Radiological protection
- LC 18 Construction or installation of new plant
- LC 20 Modification to design of plant under construction
- LC 21 Commissioning
- LC 22 Modification or experiment on existing plant
- LC 36 Control of organisational change

EDF Energy, as the Licence Holder, has developed and will implement arrangements to ensure that everyone on-site fully complies with these conditions.

These arrangements include: operating rules; operating instructions; work specifications and other documents; quality assurance; training and authorisations; maintenance schedules; plant modification; nuclear safety committee; emergency preparedness; security; control of organisational change; and a requirement to report any unplanned events.

Environmental Permitting Requirements

Alongside the Nuclear Site Licence, EDF Energy will need a range of environmental permits before it can operate HPC, including those for radioactive discharges, cooling water discharges and the operation of emergency stand-by diesel generators. A permit is also required before groundwater can be discharged during construction.

Applications for all these permits have been made to the Environment Agency, which decides if they will be issued and what conditions will be applied. EDF Energy's arrangements are being developed to ensure that everyone on-site also complies with these conditions.

Security Requirements

All workers involved with the HPC Project will be required to comply with specific personnel, physical and information security measures that are appropriate to the construction of a nuclear power station. The security arrangements will be overseen by the Office for Nuclear Regulation.

The HPC development site will be secured, with access through the perimeter fence strictly limited to authorised personnel only. In order to obtain unescorted access to the site, individuals will need to have attained a Baseline Personnel Security Standard (BPSS) level of clearance. This process involves checks of identity, nationality, a right to work in the UK, work history and unspent criminal conviction records.

BPSS clearance takes 28 days on average to process. However, in situations where the prospective applicant is a non-UK citizen, has worked outside the UK, or has had a large number of previous employers in the previous three years, the clearance could take considerably longer.

Following successful BPSS vetting, workers will be required to attend a site induction where other mandatory training, verification of required safety qualifications, and a final identity check will be conducted prior to the issue of a photographic site access pass. Once issued, the site pass remains the property of EDF Energy and must be displayed at all times whilst on-site (unless it is unsafe to do so). Passes must never be shared or loaned, and any loss or theft must be reported immediately to site security personnel.

Visitors to the site will be required to be pre-booked and escorted at all times while on-site.

All workers and visitors will be subject to security searches, including vehicle and bag checks as a condition of entry. All delivery vehicles will also be subject to security searches.

Regulatory Interface and Interactions

There will be many interfaces with regulatory organisations during the course of the construction and commissioning of the HPC power plants and the associated development facilities.

EDF Energy will maintain effective regular and routine communications with the regulatory organisations throughout the life of the HPC Project, and will share information as appropriate with the designers, Principal Contractors, contractors, suppliers and consultants working on the project.

Lines of communication between individuals and groups have been established; the Regulatory Nuclear Interface Protocol (RNIP) is an agreement between nuclear duty holders and nuclear safety and security regulators that provide a framework for these discussions. A 'ways of working' Memorandum of Understanding has been produced for interactions between the HPC development site and the Environment Agency. All communications with regulatory authorities should be via these established routes.

EDF Energy requires that contractors identify and comply with all other existing HS&E legislation relevant to their work scope. This should include all applicable requirements that legislation, permits and authorisations place on EDF Energy. Contractors should have a system for identifying new and amended legislation and for updating their working arrangements to meet these requirements.

Permissions, Consents and Licensing

It is necessary to obtain a Development Consent Order (DCO) from the Infrastructure Planning Commission (IPC) before the main construction works on the HPC Development Site can commence.

Some of the enabling and preliminary works could start under local planning permissions granted by the Local Authorities. There are additional consents and permits required from the Environment Agency, English Nature, English Heritage and the Marine Management Organisation, for works that may impact the environment.

EDF Energy is responsible for ensuring that the significant permissions, permits and consents are in place before any type of construction work commences and that management arrangements are in place to oversee these.

Contractors are responsible for ensuring that they possess the correct environmental permits relevant to their own work – for example mobile plant permits - and that they have adequate arrangements to ensure compliance.

Competency

EDF Energy requires that all staff working on the HPC Project are adequately trained and experienced to carry out their assigned work activities safely and with a minimum adverse environmental impact. They must also be part of a programme for ensuring their competencies are maintained and as a minimum, all construction workers must hold a valid CCNSG safety passport.

More specifically, all tradesmen and operatives must have a demonstrable skill level incorporating HS&E training, and should be members of recognised competency record schemes, relevant to their work or services. In addition, all line management and supervisory staff must have demonstrable competency in management and/or supervisory skills in occupational HS&E matters.

The Hinkley C "Mandatory Training for Critical Workers" can be found in Appendix A of this document.

Pre-Qualification of Contractors

A formal and detailed pre-qualification process has been developed by EDF Energy to ensure that any potential contractors have the necessary competencies and capacity to undertake the work for which they are tendering.

The process involves HS&E and sustainability questionnaires, a management system review and, potentially, a physical site inspection. Part of the evaluation considers the processes that potential contractors will use to select their lower tier sub-contractors.



Occupational Health Arrangements

EDF Energy is committed to providing a best-in-class Occupational Health (OH) facility for the HPC Project, recognising that it is a fundamental element of achieving our goal of 'Zero Harm'.

The full-time OH facility will be staffed by a team of experienced industrial nurses and physicians, and will provide both reactive and preventative services to all personnel employed on the project.

The OH team will carry out pre-employment medical screening for all workers involved in the HPC Project. The screening will consist of a medical questionnaire, and if necessary a face-to-face medical. All 'critical workers' will automatically receive a face-to-face medical.

In addition, the OH team will carry out the following activities:

- Be available to provide first aid treatment to any worker injured during the course of their work duties
- Provide routine OH advice to contractors and individuals
- Administer the project's Drug and Alcohol testing policy
- Lead and train the HPC Site Emergency Response Team
- Provide lifestyle advice to the workforce
- Provide a link to local primary healthcare trusts
- Support the project with healthcare promotions

In addition, a key role of the OH team will be to provide assistance to allow the project team to implement an effective injury management regime.



Health, Safety and Environmental Professionals

All contractors on the HPC Project will be required to employ experienced and qualified health, safety and environmental (HS&E) professionals to provide competent advice to their management and workforce. Contractors employing more than 50 workers must have a minimum of one full-time HS&E professional. Contractors employing more than 100 workers must agree with EDF Energy how many HS&E professionals are required, taking into consideration the nature of the work that is being undertaken and the number of separate operational work faces.

All HS&E professionals employed on the HPC Project will be required to attend a specific orientation that will introduce in detail the tools, recording systems and metrics that will be used to drive 'Zero Harm' on the project.

All HS&E professionals will wear red coveralls when visiting designated personal protective equipment areas, and will have "SAFETY" clearly marked on a hi-visibility waistcoat/jacket to make them easily identifiable.

As work on the HPC development site evolves, it is envisaged that the HS&E professionals from the construction contractors will work under the direction of the EDF Energy HS&E Lead, creating a team of professionals that provide advice and support to all work activities within geographical areas of the site.

Alcohol & Drug Policy

EDF Energy has developed a strict and mandatory alcohol and drug policy that will apply to everyone working on the HPC Project. No alcohol or drugs shall be consumed by personnel at any of the project work locations, and personnel must not report for work under the influence of alcohol or drugs.

All personnel working on the project will have to participate in a preemployment screening programme and will be subject to random testing. EDF Energy may also carry out 'with cause' testing following specific incidents or events, in line with the criteria set out in the alcohol and drug policy.

Anyone found in possession of illegal drugs will be reported to the police, and removed from site. They will be prohibited from working on any element of the HPC Project.

Full details of the alcohol and drug policy will be included within all Invitation to Tender packages.





Key Performance Indicators

The HPC Project will develop key performance indicators (KPI) for designers, contractors, suppliers and consultants that will be used to support and monitor progress towards HS&E objectives. The KPI will include both reactive and proactive metrics and will be measured and published on a monthly basis.

Organisations that do not meet the agreed KPI targets will be required to implement a specific recovery plan, to reach the agreed performance levels.

Organisations that cannot demonstrate by way of KPI that they are achieving the required standard of HS&E performance may have their contracts terminated, subject to the terms in their contract.

HS&E Executive Leadership Team

A HS&E Executive Leadership Team will be formed, comprising executive sponsors from the construction contractors working on the HPC Project.

This proactive, forward-looking team will review performance on the project; bring industry-wide best practice and innovation; and provide clear, effective and visible leadership on all HS&E matters.

The HS&E Executive Leadership Team will be chaired by EDF Energy's Site Construction Director and will meet quarterly.

Reward and Recognition Schemes

All construction contractors working on the HPC Project will be encouraged to introduce local reward and recognition schemes to promote and reflect EDF Energy's goal of 'Zero Harm', and to reinforce good safety behaviours.

In addition, EDF Energy will work with representatives from trade unions and contractors to develop a project-wide reward and recognition programme that will also positively promote the project within the local community.

Safety Coaches

As the construction work progresses on-site, EDF Energy will introduce and sponsor a number of Safety Coaches amongst the contractor workforce. These individuals will be experienced craftsmen who have a recognised skill and ability in a particular aspect of construction. They will be champions within the workforce, advising and assisting their colleagues on how to work safely, within their particular area of expertise.

The Safety Coaches will be assigned 'normal' work activities by their respective line managers, but will be available to provide assistance to workers from all companies as required.

Sustainability

EDF Energy is seeking to work with contractors who achieve continual improvement in their sustainability performance, adopting and implementing practices that reduce greenhouse gas emissions, reduce resource consumption, minimise waste arisings, enhance recycling opportunities and reduce environmental risks.

EDF Energy has published its corporate strategy for sustainability entitled 'Our Sustainability Commitments'¹. A number of these commitments are particularly relevant to the HPC Project and contractors are expected to support EDF Energy in their delivery.

EDF Energy is a signatory of the UN Global Compact² – a strategic policy initiative for businesses that are committed to adopting, promoting and implementing ten universally accepted principles in the areas of human rights, labour, the environment and anti-corruption. As an important aspect of its implementation of these principles, EDF Energy has pledged to work with its suppliers to ensure we are able to guarantee an ethical supply chain. More information is available on our Supply Chain website³.

Design and supply contracts placed by EDF Energy will include sustainability requirements, where appropriate - for example, procurement of timber from sustainable sources. The Sustainability Strategy, submitted as part of the DCO application, also sets out our sustainability drivers and commitments⁴.

3 - http://www.edfenergy.com/about-us/about-edf-energy/supply-chain

^{1 -} www.edfenergy.com/sustainability/our-commitments/our-sustainability-commitments

^{2 -} www.unglobalcompact.org

^{4 -} http://infrastructure.independent.gov.uk/projects/south-west/hinkley-point-c-new-nuclear-power-station/documentation

Contractors Safety Forum

All contractors working on the HPC Project will be required to send representatives to a monthly Hinkley C Contractors Safety Forum. This meeting will be attended by the contractors' site managers and off-site safety managers and will be chaired by EDF Energy's Head of Construction Safety. The purpose of the meeting is to review the HS&E performance on-site and share best practices and innovation from other parts of the construction industry.

The Contractors Safety Forum will meet on the first Thursday of every month.



Communications - Internal

EDF Energy recognises that efficient, continuous communication is a key element of an effective safety culture, ensuring that everyone involved with the HPC Project is kept informed.

Throughout the duration of the project the Principal Contractor, under guidance from EDF Energy, will ensure that there is regular communication with the workforce, providing information about the progress of the construction works, milestones achieved, upcoming challenges, safety incidents and local activities. This information will be shared via newsletters, town hall meetings led by senior management, video presentations and poster campaigns.

All contractors working on the project must recognise the challenge presented by the need to communicate with workers for whom English is not their first language. This is particularly important when ensuring that safety-related instructions are being transmitted. Whenever possible pictorial signage will be used which will be complemented by written instructions. Written instructions will be developed in languages other than English - the range of languages will be appropriate to the workforce demographic.

Arrangements must be put in place to ensure that all work crews are able to understand written and verbal safety instructions.

Communications - External

EDF Energy will be responsible for all external communications relating to the HPC Project with the local community and external stakeholders.

All interactions with the media must be directed through the EDF Energy communications department.

Community Relations

EDF Energy wants to be a good and responsible neighbour and active participant in the community. All contractors must be respectful of the needs of the local community and act accordingly.



Safety Culture Surveys

Throughout the duration of the HPC Project, regular Safety Culture surveys will be carried out to assess the workforce's attitude to HS&E matters, and to try and get a measure of the safety culture within both the construction sites and office environments.

It is recognised that the various disciplines and nationalities that will work on the project may have different expectations and perceptions of what a 'zero harm' construction project looks like. It is essential that these differences are appreciated, and that EDF Energy modifies its approach to ensure that the same message and aspirations are effectively communicated and understood.

Findings from the Safety Culture surveys will be shared openly with all contractors.



Industrial Relations Policy

EDF Energy recognises that an effective and proactive client approach to all industrial relations issues is crucial to achieving a safe, healthy and environmentally sound project. EDF Energy is working with employers and representatives from trade union organisations to develop a project-wide approach.

A separate document will set out in detail EDF Energy's industrial relations policy, but the key objectives are as follows;

- Overcome long standing industry inertia and achieve ground-breaking productivity.
- Lead and engender changes in working practices within supplier organisations, to facilitate an enhanced skills agenda.
- Address and alleviate the recognised industry skills gap, by facilitating a programme of pre-recruitment assessment and training of new entrants and adults by all suppliers at a local training facility.
- Develop and obtain trade unions agreement with a coherent, practical set of policies and procedures to promote a legacy of jobs and skills.
- Establish minimum qualification standards for first line supervision to reverse the erosion of their authority to manage employees. Conduct a fundamental review of the traditional relationship between first line supervision and the workforce, with the objective of creating self-managed, integrated teams.



Design

Design Organisations

EDF Energy's Responsible Designer organisation based in France is responsible for the concept design of the UK EPR. These designs will then be developed through the Generic Design Assessment (GDA) process to comply with UK legislation.

Following the adaptation of concept design to UK requirements, EDF Energy will engage organisations, when necessary, to undertake further detailed design works.

Recognising the key role that designers have on the health and safety of construction projects, EDF Energy will endeavour not only to achieve best practice – but to set the standard for wider industry to follow.

A key challenge for the project is the ability to ensure that all organisations are compliant with EDF Energy's expectations for design; recognising that it is at concept design where there is the greatest opportunity to reduce risk on construction sites.



EDF Energy's Expectations of Designers

EDF Energy expects designers to reduce risks within their design, and where this is not possible, requires them to inform users of these risks throughout the construction phase.

Throughout the operations and maintenance phases, key risk information will be provided through the health and safety file and through records that are required by the Nuclear Site Licence.

These expectations should be achieved by designers as follows:

- Pro-actively seek out information from third parties including sources supplying information to EDF Energy as well as other designers and contractors, so that all information is reasonably available to EDF Energy.
- Identify the hazards inherent in their designs and consider how they can be eliminated or substituted, or how the risks likely to be faced during construction, operation and maintenance can be reduced and controlled (giving collective protective measures over individual protective measures). The resulting residual risks should be appropriately identified and communicated to the project team and eventual users of the facility.
- Develop and regularly review and update a Design Risk Register covering their organisation's elements of the design.

- Include suitable and sufficient mitigation measures in designs to control these risks, and design workplaces to enable the occupier to comply with relevant statutory provisions. For example, Workplace (Health, Safety and Welfare) Regulations 1992.
- Identify significant residual risks that have not been eliminated during design, and which may result from hazards to be encountered during construction, operation, maintenance or demolition, and identify the entity responsible for the action and when it is to be implemented.
- Communicate information about the residual risks to allow contractors/ other designers and EDF Energy to comply with their duties.
- Comply with the management and risk reduction arrangements established for the project, including the Design Health and Safety Coordinator function and Design Risk Register requirements.
- Pro-actively cooperate with other designers, taking into account interfaces with other design elements. This includes sharing lessons learnt.

EDF Energy understands that success will to a large part be achieved through the effective cooperation of designers, both cross-discipline and with other CDM duty holders.

The key outputs from these processes that will help achieve best practice are:

- Design Risk Register
- Design Health and Safety Coordinator
- Design Option Evaluation
- Red, Amber, Green Lists
- Monthly Designer Self Assessment Scorecards

EDF Energy will require:

- Pre-scheduled, regular meetings with all team members of the design team – which must always include the CDM Coordinator.
- Regular internal design and constructability reviews of developing designs.
- Formal review meetings to assess the HS&E aspects of design proposals and Design Risk Register information.

- Design Review Gateways
- Designer competence matrix
- Safety, Health and Environmental (S,H,E) boxes on drawings
- Hazard Identification studies/workshops

- Edit the Design Risk Register to provide consistency of approach across different elements of the project and different designers.
- Developing and designing common standards and solutions collaboratively with all designers.

The EDF Energy CDM design processes are integrated into industry accepted norms such as Probabilistic Safety Analyses (PSAs) – thereby ensuring that CDM in Design is not merely an add-on, but an integral part of operations.



Liaison with CDM Coordinator

EDF Energy recognises that the CDM Coordinator has a significant responsibility in ensuring cooperation and managing the interfaces within the design organisation and with other duty holders.

The CDM Coordinator must play a proactive, visible and diligent role during all aspects of design work undertaken on the HPC Project including carrying out feasibility studies, concept design, detailed design, and temporary works design, in order to ensure that the designer meets the requirements of EDF Energy procedures.





Construction Site - Risk Management

Construction Phase Plan

Each Principal Contractor will be required to develop a Construction Phase Plan (CPP) that sets out the measures to be deployed for managing HS&E on the construction site. All CPPs should be written in a manner that ensures that EDF Energy's expectations are clearly addressed. The CPPs will be reviewed and updated regularly throughout the life of the HPC Project to reflect the changing conditions and requirements.

Construction contractors will be required to develop their own HS&E plans that highlight how they intend to meet the requirements set out in the CPP documents within their respective organisations. These plans must be reviewed and accepted by the Principal Contractors before the construction contractors commence work.

The CDM Coordinator will carry out periodic reviews of both the CPP and any construction contractors HS&E plans to ensure that they are suitable and sufficient.



Environmental Management and Monitoring Plan

An Environmental Management and Monitoring Plan (EMMP) will be developed for each phase (i.e. enabling works, main construction) and location (i.e. main site, associated developments) of the HPC Project by the respective Principal Contractor. These documents will set out the requirements and expectations for managing the environment on the construction sites.

Should any more detailed management or monitoring be required, it will be set out in a Subject-Specific Management Plan (SSMP). SSMPs include, but are not limited to, water and sediment management plans, site waste management plans and materials management plans.

The EMMPs will be reviewed and updated regularly by the Principal Contractor throughout the life of the HPC Project to reflect the changing conditions and requirements.



Construction Environmental Management Plan

Construction contractors working on the HPC Project will be required to develop a Construction Environmental Management Plan (CEMP) that details:

- their work activities;
- the environmental risks and impacts associated with their work activities;
- how they will mitigate risks and impacts; and
- how they will meet the environment and sustainability requirements relevant to work activities as defined in their contract, including the requirements of an EMMP and any relevant SSMPs.

The CEMP and other associated documentation must be reviewed and accepted by the Principal Contractor Site Environment Engineer and EDF Energy before the construction contractors may commence work.

The EDF Energy Site Environment Engineer will carry out periodic reviews of both the EMMP and the construction contractors CEMP to ensure that they are suitable and sufficient.

Risk Assessments & Method Statements

Risk Assessments and Method Statements must be produced for all work activities, although they may be generic if they are addressing repetitive routine tasks. The documentation must be prepared using a standard template, and will be reviewed in accordance with the EDF Energy procedure.

Risk assessments should identify the HS&E hazards and evaluate the significant risks associated with the work activity. They should specify the control measures that should be introduced to reduce the risks as far as reasonably practicable, using the general principles of prevention.

Method statements should detail the task sequencing, work methodology and control measures that must be implemented when executing the work activity.

Risk assessments and method statements must take consideration of occupational health and environmental hazards.

All documents must be submitted for approval at least 14 days in advance of the earliest planned start date.

At contractor's kick-off meetings, the proposed construction programme will be reviewed and a schedule of method statements and risk assessments will be agreed, including the date when the documentation should be submitted for review.

It is the responsibility of supervisors to brief their work crews on the content of the method statement and risk assessment documentation prior to setting them to work.



Point of Work Risk Assessments

Each work crew must carry out a Point of Work Risk Assessment (POWRA) at the start of each work activity and re-visit it when conditions affecting the safe execution of the activity change. The POWRA should be carried out in accordance with the STAR principles:

Stop ► Think ► Act ► Review

Supervisors are required to visit each work location and challenge the crew on their understanding of the work activity (and agreed control measures) before counter-signing POWRAs within the first two hours of every shift.

Work Authorisation Process

All Principal Contractors will be responsible for introducing an authorisation process for controlling the execution of all construction and commissioning activities.

Work authorisation processes must be appropriate and effective in managing the hazards and interfaces associated with the various packages of work.

EDF Energy will develop specific Safety Rules to provide 'safety from the system'. These rules will also introduce specific work permits.

All construction contractors who will be required to work under a work authorisation or 'permit' for work' system will be provided with training to ensure that there is a clear understanding of the process involved.



Coordination of Work Faces

Coordination meetings will be held daily with all contractors to ensure that there is a clear understanding of forthcoming scheduled work activities and areas where there will be possible interface issues. The approved construction schedule, and detailed three-week look-ahead programme will be used to facilitate these discussions.

The meetings will be chaired by the Principal Contractor construction manager, and will include site supervision, contractor management and HS&E representatives.

The meetings will also look at details of any recent safety or environmental issues, security or welfare concerns, and significant Learning Reports.

Emergency Arrangements

Each Principal Contractor is responsible for ensuring that there are adequate arrangements in place to respond to any emergency that may occur on the construction site.

On the HPC development site, an EDF Energy Emergency Preparedness Engineer will be responsible for developing and maintaining the emergency plans, which will describe the site response in the event of a radiological or non-radiological (chemical) emergency from either of the adjacent stations, or from HPC, when radioactive materials and chemicals are introduced, stored and used on the site.

Additional protection measures will be required for work executed near or over water (including the construction of the temporary jetty, sea wall, and Combwich wharf), within confined spaces and at height.



Incident Reporting and Investigation

All incidents that occur on the HPC Project must be reported immediately using the relevant EDF Energy procedure.

All incidents will be investigated to determine causal factors and allow remedial corrective actions to be introduced. EDF Energy will assist the Principal Contractors in carrying out any investigations and likewise contractors will be expected to assist EDF Energy with its investigations.

EDF Energy will set the requirements for notifications to the regulatory authorities in relation to incidents that occur on the HPC Project. Where the contractor is responsible for such a notification, a copy should also be provided to EDF Energy.

Note: incidents are defined as "any unplanned events" - it does not require a loss to be sustained.

Trend Analysis

Information obtained from safety inspections, safety walk-throughs, learning reports, incident investigation reports and so on, will be used to identify areas for improvement and focus points to prevent unplanned events in the future.

This analysis will be done by EDF Energy's construction team and shared with all contractors







Construction Site

- Management Of Health, Safety & Environment

Personal Mobile Telephones / Radios / Audio Equipment

Personal mobile telephones are not permitted to be used in any construction, fabrication or laydown areas on the HPC Project. They must not be used in any site vehicles or delivery vehicles, even if they are hands-free or Bluetooth enabled.

Designated areas will be created across the HPC development site where it will be permissible to use personal mobile phones.

Contractors that use mobile phones for operational communication must ensure that they identify 'authorised phone users' and provide specific instructions and training on how to use mobile telephones safely. They must ensure that the use of the telephone does not put either the user or others at any increased risk.

Personal radios and audio equipment, including earphones and headsets, are prohibited on HPC construction sites.

Smoking

Smoking is prohibited at all HPC Project work locations, including offices, laydown areas, welfare facilities, warehouses and within vehicles.

Smoking will be permitted at a number of specific facilities, which will be managed to ensure that any risk of fire is minimised, and to ensure that others are not subjected to the effects of passive smoking.

Construction Plant

All construction plant that is brought to the HPC Project site must be properly maintained, have the appropriate statutory inspection reports/certificates and must be operated by trained, experienced and authorised persons.

Wherever practicable, construction plant must use bio-degradable hydraulic oils and bio-degradable engine oils, when working close to watercourses.

Any maintenance work which is required to be undertaken on construction plant must be carried out in a designated area, under a written safe system of work.

Personal Protective Equipment

EDF Energy has established a Personnel Protective Equipment (PPE) standard that must be complied with by all persons visiting or working in a construction area on the HPC Project.

Anyone visiting the construction areas must wear, as a minimum:

• Light eye protection

• Standard coveralls

- Safety helmet
- Lace-up safety boots
- Gloves

- High visibility waistcoat or jacket
- Ear protection (available to be used if required)

Coloured safety helmets will be used as a means of identifying those who hold key roles on the project, as follows:

Contractor working foreman	Blue helmets
Contractor non-working foreman	Black helmets
Contractor supervisors	
Contractor managers	
All First Aiders / medical staff	Green helmets
All trainees, apprentices, young people	Red helmets
All visitors	Yellow helmets
All other workers on site	White helmets

Banksmen shall wear orange high visibility tabards to enable them to be easily recognised by plant operators.

The risk assessment process will identify any additional or specialist personal protective equipment that may be required for a particular task.

'PPE Boards' will be constructed and posted throughout the site, to provide guidance on the selection of the correct type of equipment.



Laydown Areas

Construction contractors will be assigned specific areas for the storage, fabrication or pre-assembly of materials and for the maintenance of plant and equipment. Contractors are responsible for ensuring these areas are well maintained and organised with adequate access and egress for anyone working in the vicinity.

Any work undertaken within these assigned laydown areas will be controlled in the same manner as work undertaken on main construction areas and to the same standard.

Welfare Facilities

Principal contractors must ensure that there are best-in-class welfare facilities including canteens, changing and drying rooms, and toilet facilities at all HPC Project locations. Particular attention must be paid to ensure that there are adequate footpaths, steps and staircases to allow safe access to these buildings.

Construction contractors who wish to bring their own cabins or office accommodation blocks, will be provided with a level area to locate the buildings. Any such buildings must be to a site-approved standard.

Contractors will be responsible for employing cleaners to ensure that the facilities are maintained to a high standard of cleanliness and repair.

Hazardous Substances

Contractors must ensure that they have complete listings of all hazardous materials that they propose bring on-site, complete with Control of Substances Hazardous to Heath (COSHH) assessments that identify the control measures that should be adopted when using the materials.

The quantity of hazardous substances brought on-site must be kept to a minimum, and must be stored in accordance with the manufacturers' recommendations.

Radioactive Materials and Ionising Radiation

No radioactive materials (including smoke detectors using radioactive material; radiographic sources; densitometers) or other source of ionising radiation (for example, X-ray equipment) shall be brought on-site without the prior permission of an authorised EDF Energy radiation protection representative.

Radioactive material or sources of ionising radiation authorised for use onsite shall have adequate arrangements - including safe storage, handling and accounting for radioactive material – agreed in advance with EDF Energy.

Access to Site

The HPC Development Site is accessed from the existing highway that is already being used by traffic travelling to Hinkley A and Hinkley B power stations. It is essential that this regular traffic is not adversely impacted by the construction activities, and consequently no private vehicles will be allowed to park at the site. All workers will be required to use the dedicated park-and-ride facilities operating from Bridgwater, Cannington and Williton to travel to Hinkley Point.

To reduce the amount of material deliveries arriving by road, a freight consolidation depot will be established in Bridgwater.

Details of the measures that will be introduced to minimise the volume of traffic on the public highways is set out in EDF Energy's Traffic and Transportation Plan.

Site Induction

EDF Energy has developed a HPC Project induction to provide all workers with information relating to the project, configuration of the site, and details of emergency arrangements.

The inductions are delivered at an off-site location by experienced trainers, and lasts for approximately four hours.

Introductory letters will be sent to the home address of all employees in advance of their attendance at the site induction. It is estimated that around 30,000 employees will be inducted throughout the duration of the project.

Senior management from EDF Energy will open each induction session, communicating their personal commitment to safety on the project.

In addition, contractors will be responsible for providing all new employees with an orientation to ensure they understand the specific rules surrounding the work activities they will be undertaking.



Site Supervision

All line management on-site, including managers, foremen, supervisors and chargehands, are key to ensuring that we achieve our goal of 'Zero Harm'. Line management must be experienced and competent within their specific discipline and must demonstrate positive leadership qualities.

Line management on the Hinkley C project must:

- Demonstrate a personal commitment to HS&E matters by means of their attitude and behaviours;
- Challenge unsafe behaviours or conditions and personally take action to ensure that they are corrected;
- Ensure that their workforce is aware of the agreed safe system of work;
- Ensure that they fully understand the emergency arrangements for the site and are prepared to take a proactive role in the case of an emergency; and
- Support any HS&E initiatives that are implemented across the project, by both personal participation and promotion within their respective organisation.

All line management working on the HPC Project must attend an EDF Energy "Supervisors' Safety Behaviour Workshop", which is a one day course that will be held off-site.

Trade / Skill Competencies

EDF Energy will work with Principal Contractors and main construction contractors to develop a trade vocational training competency matrix, highlighting the mandatory training qualifications required for workers undertaking differing roles on-site.

This information will be shared with local training providers to allow them to develop and run necessary skill-based courses for local workers.

Toolbox Talks

All contractors working on-site will be expected to carry out regular toolbox talks with their workforce to provide 'refresher training' on topics that are relevant to their current/future work activities.

In addition, EDF Energy will create specific briefings to highlight issues that have been identified during site inspections or audits; or learnings that have been established from the investigation of recent incidents.

Scaffolding and Working at Height

All scaffolding on the HPC Project must be constructed by competent contractors, and be inspected and tagged before use. Additionally, it is the responsibility of each supervisor to ensure that the scaffold is fit for purpose before setting their crew to work.

All scaffold personnel must wear a safety harness at all times whilst carrying out scaffold erection/dismantling /alteration operations and work in accordance with the current guidance from the National Association of Scaffolding Contractors (NASC)3.

On the HPC Project, staircases will be the default means of access to a scaffold, with ladders being used only when supported by a risk assessment. Scaffolding contractors must also utilise advanced guarding systems wherever possible during the construction of scaffold structures.

Wherever possible, the Principal Contractor should only employ one scaffolding contractor on each project site.

Collective protective measures must be priority when planning working at height activities. Wherever possible, full-height guarding must be installed on exposed edges and open voids.

Lifting Operations

All lifting operations carried out during the HPC Project must be adequately planned in advance and carried out under the control of a competent and authorised person.

Lifting plans must be prepared at least 14 days in advance and reviewed by the Principal Contractor. The complexity and detail required within the lifting plans will be proportionate to the type of lift being undertaken.

All lifting operations must be controlled by nominated banksmen, who will be required to wear orange high visibility tabards to ensure that they are easily identifiable.

Principal Contractors will instigate a colour-coding system for all lifting gear onsite that will be changed every six months.

Tag lines must be used with all suspended loads.

3 - www.nasc.org.uk/Publications_and_Guidance

Site Transportation

The EDF Energy construction team will introduce a traffic management system on-site that recognises the significant hazard that people/vehicle interface can create.

The traffic management system, and in particular the routes to be taken, will change frequently throughout the duration of the HPC Project and details of traffic routes will be posted on site notice boards, and discussed at daily coordination meetings.

During the early phase of the project on the HPC development site, there will be designated haul roads which will only be allowed to be used by specialist earthmoving equipment.

All cranes and any vehicles carrying out reversing manoeuvres must have a nominated banksman (who will be distinguished by an orange coloured hi-visibility tabard).

Safety Inspections

Formal safety inspections, led by their health and safety professional, will be carried out by all contractors on a weekly basis as a minimum. A formal record of these inspections will be forwarded to the EDF Energy Construction Team for collating and trending purposes.

The EDF Energy Construction Team will lead daily safety walk-throughs across all construction areas. These walks will be led by a construction supervisor and will involve representatives from all contractors working in a particular area. Items identified during walk-throughs will be formally recorded.

Learning Reports

EDF Energy has introduced a formal process for recording both positive and negative observations made onsite.

The 'Learning Report' process will allow all employees to record details of any unsafe acts or conditions which they have corrected or observed on-site, together with details of any conditions that they require assistance in resolving.

The information contained within completed 'Learning Report' cards will be reviewed regularly by a screening team comprising of EDF Energy's Site Construction Director and HS&E Lead, to understand if there are any systemic issues emerging on-site and as the basis for determining local focus areas.

Site Health, Safety and Environment Committee

A site HS&E committee will be established with representatives from all contractors working on-site expected to attend. The meeting will work to a standard agenda and will be chaired by EDF Energy's Construction Team HS&E Manager. Issues raised by the site HS&E committee will be elevated to EDF Energy's Construction Team for consideration.

'Lessons Learned' Documentation

Formal 'Lessons Learned' documents will be produced and communicated to everyone involved with the project. All such documents must be reviewed and approved by EDF Energy before they can be distributed.

Hours Worked

The permitted hours of work on the construction project will be determined by the local authority planning conditions. These will be set to protect the interests of the local community, in terms of impact upon the road network and noise and nuisance in the neighbouring areas.



Tagged Management

Members of EDF Energy's senior management team will be tagged with individual contracting companies to help sponsor their safety programme and demonstrate our commitment, recognising that as a project we are only as strong as our weakest player.

The expectation is that the tagged manager will participate in toolbox talks, safety briefings and safety tours with their contractor's management team.

Removal of Workers from Site

EDF Energy intends that the HPC Project will be open, inclusive and transparent, with a positive but fair safety culture.

The HS&E expectations and requirements placed upon contractors have been clearly communicated. Both contractors and individuals will be held accountable if they fail to comply with these requirements.

Any disciplinary measures will follow the agreed industrial relations strategy.

Appendices

Appendix A Hinkley C Mandatory Training For Critical Workers

Safety Critical Role	Role Description	Minimum Mandatory Training
Basic Scaffold (system)	Construction, dismantling and maintenance of system scaffolding i.e. Kwikstage / Cuplock	CISRS basic
Advanced Scaffolder (system)	Supervision of the construction, dismantling and maintenance of system scaffolding i.e. Kwikstage/ Cuplock	CISRS Advanced
Basic Scaffolder (tube and fitting)	Construction, dismantling and maintenance of tube and fitting scaffolding	CISRS basic
Advanced Scaffolder (tube and fitting)	Supervision of the construction, dismantling and maintenance of tube and fitting scaffolding.	CISRS Advanced
Scaffolder (aluminium mobile tower less than 5m in height)	Construction, placement, dismantling and maintenance of mobile tower scaffolding	PASMA Mobile Scaffolding certificate (<5m) CISRS basic
Scaffolder (aluminium mobile tower more than 5m in height)	Construction, placement, dismantling and maintenance of mobile tower scaffolding	PASMA CISRS Advanced scaffolder (>5m)

Safety Critical Role	Role Description	Minimum Mandatory Training
Plant Operator		All plant operators shall be CPCS or NPORS certified with the following exceptions and additional requirements:
		NVQ 2 Plant Operations [2 year validity 'Red' Card]
		Operators of specialist/ unusual plant not covered by CPCS or NPORS shall provide evidence of suitable training by their Employer to the Principal Contractor prior to commencing work
Plant Operator Mobile Elevated Work Platform (MEWP)		Must hold one of the following qualifications: Powered Access License issued by IPAF
		NPORS for the specific type of MEWP i.e. telescopic boom, scissor lift etc
		CPCS for the specific type of MEWP i.e. telescopic boom, scissor lift etc

Safety Critical Role	Role Description	Minimum Mandatory Training		Safety Critio
Plant Operator (Telehandler)		Must hold either NPORS or CPCS specific category for the type of plant to be operated		Slinger/Signa
		Plus evidence of familiarity for using any ancillary equipment e.g. buckets, fork extensions, fork mounted hooks		
Plant Operator (Dumper Operator)		CPCS or NPORS or EUS plus specific category for the type of plant to be operated		Banksman (V
Plant Operator (Excavator Operator - 180o or 360o)		CPCS or NPORS for the specific category of plant to be operated		
		Plus CPCS training module if used for lifting (available since 2008)		
		Plus evidence of familiarity with attachment(s) e.g. pecker, quick hitch, shears etc		Plant Banksm
Plant Operator (Crane Operator - mobile)		CPCS or NPORS for the specific category of plant to be operated	excavators, to and front end others as req assessment)	
Plant Operator (Lorry Loader)		CPCS or NPORS if Tier 1 or Subcontractor (excludes Supplier's delivery drivers for now)		
Plant Operator (Crane Operator – Static)		CPCS or NPORS		

afety Critical Role	Role Description	Minimum Mandatory Training
inger/Signaller	Ensures loads to be slung (e.g. off loading materials) are slung correctly and gives signals to operators to control lifting operations by cranes, excavators, or telehandlers	CPCS Slinger/Signaller NPORS
anksman (Vehicle Marshall)	Communicates with and guides the vehicle operator used for deliveries of plant, equipment and materials to site that require escorting from site entry point to the laydown area, ensuring the route is suitable for the type and size of vehicle. Also communicates with and guides the reversing of delivery vehicles around the site	NPORS
ant Banksman (heavy obile plant including .cavators, telehandlers Id front end loaders and hers as required by risk sessment)	Communicates with and guides the vehicle operator of heavy mobile plant during its movement about the site and at the point of work ensuring the plant movement and work area is clear of any obstructions or hazards	NPORS Banksman Training plus HSG47 awareness training (in-house or external) when banking a mechanical excavator i.e. when constantly present during mechanical excavation acting as the eyes and ears of the excavator operator, guiding the operator and watching out for signs of buried services

Safety Critical Role	Role Description	Minimum Mandatory Training
Cable Avoidance Tool (CAT) Operator	Ensure the equipment is fit for purpose, scan the relevant area before any ground is broken and mark any potential underground hazards. Continually scan the area during the excavation process conforming to safe digging techniques	Specific training in type of CAT City & Guilds
Lift Supervisor		CPCS
Lift Appointed Person		CPCS
Temporary Works Coordinator (TWC)	Ensure that a proper system of identifying, designing, design checking is in place. Site checking, loading and unloading temporary works is in place and adhered to. Sole authority to allow loading of the temporary works. The TWC duties and responsibilities will be in addition to the individual's other responsibilities	To be decided
Temporary Works Supervisor		To be decided

Safety Critical Role	Role Description	Minimum Mandatory Training
Permit Issuer	Issues permits relevant to work i.e. permit to dig, hot works permit, demolition permit, permit to pump, permit to load, confined spaces, LV energisation etc. ensures the correct information is entered onto the permit and that the person receiving the permit is authorised	Trained and authorised against a procedure
Permit Receivers	This is dependant on the type of permit e.g. the person must be deemed competent by the site management team to receive permits. For example, to receive a hot works permit the receiver must have attended a fire awareness course	Trained and authorised against a procedure
Excavation Inspectors (daily and weekly)	Carries out daily and weekly inspections to ensure any excavations on-site are safe to enter or correctly covered; this must be carried out on a daily and weekly basis and recorded on the excavation tag	Construction skills/National Construction College Excavation and Proprietary Shoring course (3-4 day course)
Scaffold Inspectors		PASMA/CISRS/ NASC Scaffold inspection course (2-day)

Safety Critical Role	Role Description	Minimum Mandatory Training
Security to Site Compound	Only companies who are members of the British Securities Industries Association or the International Professional Security Association shall provide site security	CCNSG
Foreman/Ganger (Supervisor/ Frontline Leader)	Supervision of on-site construction work, delivering workforce briefs, ensuring safe systems of work are adhered to and progression of work reflects the construction programme	CITB/ECITB 2-day Site Supervisors Safety Training Scheme or IOSH Supervising Safely or CCNSG Supervisors Card
Site Manager		SMSTS PMSTS IOSH Managing Safely Construction Site Management NVQ Level 6
Electricians	The roles are all described by the Joint Industry Board [for the Electrical Contracting Industry] and include, but are not limited too; Site Electrician, Approved Electrician, Labourers, Jointers, Cable Installation Supervisors, Highway Lighting Grades and Cable Foreman	Joint Industry Board grading system

Safety Critical Role	Role Description	Minimum Mandatory Training
Fabricating Steel Structures		ECITB ACE Card
Installing Plant and Systems Pipefitting		ECITB ACE Card
Installing Plant and Systems Mechanical		ECITB ACE Card
Installing Plant and Systems Instrument Pipefitting		ECITB ACE Card
Welding Pipework		ECITB ACE Card
Welding Plate		ECITB ACE Card
Constructing Capital Plant Steel Structures – Errecting		ECITB ACE Card
Moving Loads		ECITB ACE Card
Non-Destructive Testing		ECITB ACE Card
Confined Space Working		City & Guilds Level 2
Top Man Person – High Risk		City & Guilds Level 4
Confined Space Working – Emergency Rescue		City & Guilds Level 3



Appendix B Abbreviations

Abbreviation	Description
ACE	Assuring Competence in Engineering
BPSS	Baseline Personnel Security Standard
CAT	Cable Avoidance Tool
CCNSG	Client Contractor National Safety Group
CDM Regulations	Construction (Design & Management) Regulations 2007
СЕМР	Construction Environmental Management Plan
CISRS	Construction Industry Scaffolders Record Scheme
СІТВ	Construction Industry Training Board
СОЅНН	Control of Substances Hazardous to Heath
CPCS	Construction Plant Competency Scheme
СРР	Construction Phase Plan
DCO	Development Consent Order
ECITB	Engineering Construction Industry Training Board
EMMP	Environmental Management and Monitoring Plan

Abbreviation	Description
EUS	Energy and Utility Skills
EPR	European Pressurised Water Reactor
GDA	Generic Design Assessment
HESAC	EDF Health Environment and Safety Advisory Committee
НРС	Hinkley Point C
HSE	Health and Safety Executive
HS&E	Health, Safety and Environment
IOSH	Institute of Occupational Safety and Health
IPAF	International Powered Access Federation
IPC	Infrastructure Planning Commission
JIB	Joint Industry Board [Electrical Contracting Industry]
КРІ	Key Performance Indicator
MEWP	Plant Operator Mobile Elevated Work Platform
NAECI	Civil Engineering and National Agreement for the Engineering Construction Industry

Abbreviation	Description
NASC	National Association of Scaffolding Contractors
NPORS	National Plant Operators Registration Scheme
NVQ	National Vocational Qualification
ОН	Occupational Health
ONR (CNS)	Office for Nuclear Regulation (Civil Nuclear Security)
PASMA	Prefabricated Access Suppliers' and Manufacturers' Association
POWRA	Point of Work Risk Assessment
PPE	Personnel Protective Equipment
PSA	Probabilistic Safety Analysis
SMSTS	Site Managers Safety Training Scheme
SSMP	Subject-Specific Management Plan
TWC	Temporary Works Coordinator

Document number NNB-PCP-STA-000005, Rev. 2.