

RWE	ONSHORE (Europe & APAC) HSE Requirements for Contractors Working on RWE Renewables Onshore : Wind, Solar & Battery Sites Terms & Conditions		Issuing Dept. ANB-EH Doc. No.: ANB-EH_HSE001_UK Revision: 0.2 Page: 1/28
	prepared _____ checked _____ released _____		Status : Current Released : August 2019 Review date: August 2021

ONSHORE (Europe & APAC)

HSE Requirements for Contractors Working on RWE Renewables Onshore : Wind, Solar & Battery Sites

Terms & Conditions

(UK version)

prepared: _____


checked: _____

released: _____

Document applicable for	
	Onshore
Development	X
Projects	X
Operations	X
Enabling Functions	X

Revision Index

Rev	Modification	Issue Date	Page	Author
0	Note : iTPA HSE Requirements T&Cs specific document issued for iTPA contracts(ANB-EH_iTPA HSE 001	March 2018		
0.1	Updated to align with iTPA : Including GWO Training (2.8) and lifting exclusion zones (8), Update of Document Number from ANB-EUH 001 to ANB-EH_HSE001_UK	June 2019		

	ONSHORE (Europe & APAC) HSE Requirements for Contractors Working on RWE Renewables Onshore : Wind, Solar & Battery Sites Terms & Conditions			Issuing Dept. ANB-EH Doc. No.: ANB-EH_HSE001_UK Revision: 0.2 Page: 2/28
	prepared	checked	released	Status : Current Released : August 2019 Review date: August 2021

0.2	Addition of "Basic Lifts" and "Complex Lifts to Definitions/Interpretation. Update of UK Wind Control Centre number (4.8). New Forestry and Arboricultural Work Section (Section 16). Addition of Legionella to Section 17. Note added to Fire Section regarding requirements (Section 23)	July-2019	2/24/26	
	Formatting of document to include RWE logo and Innogy Renewables replaced with RWE Renewables. Document Title expanded to align with current COO structure, Onshore Wind to Onshore : Wind, Solar & Battery Sites. Content remains the same, revision number unchanged.	Nov-2020		

Confidential

RWE Renewables UK Ltd is the owner of this document and all intellectual property rights in relation thereto. No part of this document may be reproduced, or transmitted in any form by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of RWE Renewables UK Ltd.

Liability

The user of this document has the obligation to employ safe working practices for any activities referred to and to adopt specific practices appropriate to local conditions. The information provided in this document is of general scope. It is the responsibility of the user to verify the appropriateness of the information, guidance or any general recommendations made within this document for specific applications. RWE Renewables UK Ltd shall have no liability for any loss, damage, injury, claim, expense, cost, or other consequence howsoever arising, as a result of use or reliance upon any information contained in or omitted from this document.

Statutory Compliance

This document sets the minimum standards expected by RWE Renewables. Anyone wishing to rely on this document must make their own investigations as to the appropriate legislation, regulations and codes of good practice applicable. In the event of a conflict between such legislation, regulations and codes of good practice and this document, the legislation, regulations or codes of good practice should prevail.

DEFINITIONS / INTERPRETATION

In this document the following words and expressions shall have the meanings hereby assigned to them:

"Basic Lifts"	Lifting operation where the load characteristics are considered straightforward and there are no significant hazards within the working area or on the access route for the crane to the working area
"Complex Lift"	Lifting operation where significant hazards have been identified with the load or with the working area or access route of the crane, and the crane is used to lift complex loads or persons, or where two or more cranes are used to lift the load, or where the lifting operation is carried out at a location with exceptional hazards
"Contract"	means the Contract, or Agreement as defined in the Contract;
"Contractor"	means the Contractor, Consultant, Agent, or Service Provider as defined in the Contract;

RWE	ONSHORE (Europe & APAC) HSE Requirements for Contractors Working on RWE Renewables Onshore : Wind, Solar & Battery Sites Terms & Conditions		Issuing Dept. ANB-EH Doc. No.: ANB-EH_HSE001_UK Revision: 0.2 Page: 3/28
	prepared checked released	Status : Current Released : August 2019 Review date: August 2021	

"Control Room"	A manned room or building used to monitor the wind turbines or site, which can be used to account for staff and Contractors on site.
"Employer"	means the Employer, Client, or Owner as defined in the Contract;
"Gas Safe Register"	Is the official registration scheme in the United Kingdom, Isle of Man and Guernsey for installers and maintenance engineers dealing with gas appliances.
"Lifting Accessories"	Attachments used for anchoring, fixing or supporting the equipment to the load, which is not a permanent part of the load.
"Lifting Equipment"	Work equipment used for lifting or lowering a load
"Mobile Plant"	Ride-on plant equipment i.e. excavators, pavers, loading shovels etc.
"Permits"	Permit-to-work is a documented procedure that authorises certain people to carry out specific work within a specified time frame
"Site"	means the site of the Onshore : Wind Farm, Battery Storage or Solar Farm or Employers premises which is identified in the Contract;
"Safety Rules"	means the Employers HV Safety Rules or Wind Turbine Safety Rules
"Shall"	will or must. These make a task/duty mandatory
"Simple Lifts"	Routine, non-complex lifts with minimal risk
"TO"	means the Technical Officer, Employers Representative, or Employers Project Manager, Employer Contact as defined in the Contract;

ABBREVIATIONS


ACOP	Approved Codes of Practice
AED	Automated External Defibrillator
ALARP	As Low as Reasonably Practicable
CDM	Construction Design Management
CISRS	Construction Industry Scaffolders Record Scheme
CITB	Construction Industry Training Board
COSHH	Control of Substances Hazards to Health
CPCS	Construction Plant Competence Scheme
CSCS	Construction Skills Certification Scheme
DoC	Declaration of Conformity
GWO	Global Wind Organisation
EMF	Electromagnetic Fields
ESQCR	Electricity Safety Quality Continuity Regulations
FRA	Fire Risk Assessment
HSE&S	Health, Safety, Environment and Security
HSG	Health and Safety Guidance
HV	High Voltage (A voltage exceeding 1000 volts)
IEE	Institution of Electrical Engineers
IPAF	International Power Accessed Federation

RWE	ONSHORE (Europe & APAC) HSE Requirements for Contractors Working on RWE Renewables Onshore : Wind, Solar & Battery Sites Terms & Conditions		Issuing Dept. ANB-EH Doc. No.: ANB-EH_HSE001_UK Revision: 0.2 Page: 4/28
	prepared checked released		Status : Current Released : August 2019 Review date: August 2021

JIB	Joint Industry Board
LOLER	Lifting Operations and Lifting Equipment
LV	Low Voltage (A voltage not exceeding 250 volts)
MS	Method Statement
MV	Medium Voltage (A voltage exceeding 250 volts but not exceeding 1000 volts)
NASC	National Access & Scaffolding Confederation
NICEIC	National Inspection Council for Electrical Installation Contracting
NPORS	National Plant Operators Registration Scheme
NRSWA	New Roads and Street Work Act
PASMA	Prefabricated Access Suppliers and Manufacturers Association
PPE	Personal Protective Equipment
PUWER	Provision and Use of Work Equipment
RA	Risk Assessment
RAMS	Risk Assessment Method Statement
RCA	Root Cause Analysis
RIDDOR	Reporting of Injuries Diseases and Dangerous Occurrences Regulations
RUK	Renewables United Kingdom
SSoW	Safe System of Work
SWL	Safe Working Loads
UK	United Kingdom

Contents

DEFINITIONS / INTERPRETATION	2
ABBREVIATIONS	3
1 OBJECTIVES	6
2 STATUTORY AND CONTRACTUAL RESPONSIBILITIES	7

	<div>ONSHORE (Europe & APAC)</div> <div>HSE Requirements for Contractors Working on</div> <div>RWE Renewables Onshore : Wind, Solar & Battery Sites</div> <div>Terms & Conditions</div>			<div>Issuing Dept. ANB-EH</div> <div>Doc. No.: ANB-EH_HSE001_UK</div> <div>Revision: 0.2</div> <div>Page: 5/28</div>
	prepared	checked	released	<div>Status : Current</div> <div>Released : August 2019</div> <div>Review date: August 2021</div>

2.1	GENERAL	7
2.2	CONSTRUCTION WORK.....	7
2.3	CONTRACTOR'S REPRESENTATIVE FOR HEALTH AND SAFETY	7
2.4	HEALTH AND SAFETY PLAN	7
2.5	RISK ASSESSMENTS AND METHOD STATEMENTS RA/MS.....	8
2.6	COMPETENT HEALTH AND SAFETY ASSISTANCE	8
2.7	SUB-CONTRACTING	9
2.8	COMPETENCE	9
2.9	SITE INDUCTION TRAINING	10
2.10	INCIDENTS/EMERGENCIES	10
2.11	STATUTORY BREACHES	11
2.12	EMERGENCY ARRANGEMENTS.....	11
2.13	MONITORING	11
2.14	REPORTING OF STATISTICS	12
2.15	MEETINGS	12
2.16	LANGUAGE	12
2.17	IMMINENT DANGER	12
3	SAFE SYSTEMS OF WORK.....	12
3.1	SAFETY RULES (PERMIT SYSTEM)	13
3.2	GENERAL SAFETY	13
4	GENERAL HEALTH, SAFETY AND ENVIRONMENT – CONTRACTORS AT WORK	13
4.1	WORK EQUIPMENT	13
4.2	PERSONAL PROTECTIVE EQUIPMENT	13
4.3	FIRST AID	14
4.4	FITNESS TO WORK	14
4.5	HOUSEKEEPING	14
4.6	ENVIRONMENT.....	14
4.7	WASTE.....	15
4.8	RECORD OF ATTENDANCE	15
4.9	CONDUCT ON SITE	15
4.10	LONE AND REMOTE WORKING	15
4.11	WORK ON BUILDING STRUCTURE	15
4.12	WORK AT HEIGHT	16
4.13	FLOORS.....	16
4.14	WELFARE FACILITIES.....	16
4.15	SECURITY.....	17
5	BARRIERS, GUARDS, SCREENS AND NOTICES.....	17
6	EXCAVATIONS.....	17
7	SCAFFOLDING AND SAFE MEANS OF ACCESS	18
7.1	GENERAL	18
7.2	INSPECTIONS / SCAFFOLD TAGS / HANDOVER AND CERTIFICATION	18
7.3	LADDERS AND STEPS.....	19
8	LIFTING TACKLE, LIFTING APPLIANCES (MACHINES) AND HOISTS.....	19
9	GENERAL	20
9.1	ELECTRICAL.....	20


RWE	ONSHORE (Europe & APAC) HSE Requirements for Contractors Working on RWE Renewables Onshore : Wind, Solar & Battery Sites Terms & Conditions			Issuing Dept. ANB-EH
	prepared	checked	released	Doc. No.: ANB-EH_HSE001_UK Revision: 0.2 Page: 6/28
				Status : Current Released : August 2019 Review date: August 2021

9.2	INSPECTION AND TESTING.....	20
9.3	CONNECTIONS.....	20
9.4	PORTABLE ELECTRICAL TOOLS.....	20
9.5	EARTHING AND VOLTAGE LIMITS	21
9.6	HEATERS.....	21
10	HOT WORKING.....	21
10.1	GENERAL	21
10.2	WELDING.....	21
10.3	GAS WELDING OR BURNING	21
10.4	USE OF ARC WELDING EQUIPMENT	21
11	ASBESTOS	22
12	LEAD.....	22
13	SAFE WORKING WITH HAZARDOUS SUBSTANCES.....	22
14	VEHICLES, MOBILE PLANT & MOBILE CRANES	22
14.1	VEHICLES AND MOBILE PLANT	22
14.2	MOBILE CRANES	23
15	CONFINED SPACES	23
17	LEGIONNELLA LEPTOSPIROSIS AND LYMES DISEASE	24
18	FLAMMABLE LIQUIDS AND GASES.....	24
19	PROTECTIVE EQUIPMENT AND CLOTHING	24
20	NOISE	25
21	HIGH PRESSURE WATER WASHING AND STEAM CLEANING	25
22	HIGH VOLTAGE ENCLOSURES.....	25
23	FIRE	25
24	CONTRACTORS QUERIES.....	26
	GENERAL SAFETY REQUIREMENTS	26

1 OBJECTIVES

The purpose of this document is to communicate the minimum requirements and expectations of the Employer in the application of health, safety and environmental standards on its Sites. Sites include all Onshore : Wind farms, Solar, PV, Battery & Storage during development, construction and operations; and other premises where contractors are engaged to carry out work on the Employers behalf. This document is intended to promote the health and safety of Contractors and their employees by establishing minimum standards for control and specific requirements to avoid danger from hazards during Contract work on the Employer's Sites or premises.

Whatever may be the pressure for speedy completion of the work, the Employer takes everyone's health and safety seriously and whilst you are with us, we ask you join our team to ensure that your actions support the positive proactive safety standards we expect. RWE Renewables are committed to continuously improving our safety culture and as a result

	<div>ONSHORE (Europe & APAC)</div> <div>HSE Requirements for Contractors Working on</div> <div>RWE Renewables Onshore : Wind, Solar & Battery Sites</div> <div>Terms & Conditions</div>			<div>Issuing Dept. ANB-EH</div> <div>Doc. No.: ANB-EH_HSE001_UK</div> <div>Revision: 0.2</div> <div>Page: 7/28</div>
	prepared	checked	released	<div>Status : Current</div> <div>Released : August 2019</div> <div>Review date: August 2021</div>

you may be requested to take part in short safety stand down sessions. Please be receptive to these communications and engagements to work with us to ensure everyone gets home safely at the end of every day.

In the Contract RWE Renewables may provide additional health and safety information to the Contractor regarding the specific Contract work. This document describes the arrangements required of the Contractor for the management of health and safety and highlights the most common hazards and hazardous activities encountered during work on RWE Renewables Onshore sites together with the minimum acceptable standards for control to be exercised by the Contractor. The hazards and hazardous activities identified within this document are not to be considered exhaustive, but it contains those most frequently encountered and most likely to cause injury or ill health.

This document must be read carefully, and its receipt acknowledged in writing in connection with a specific Contract. No variation will be permitted without the express written permission of the Employers responsible person for the Contract, For example in the UK this person would be the Technical Officer (TO) and for the purposes of this document any further reference to a TO will mean the person responsible for the Contract.

2 STATUTORY AND CONTRACTUAL RESPONSIBILITIES

2.1 GENERAL

The Contractor shall ensure that its employees, those of its sub-contractors and any other agent acting on behalf of the Contractor comply with all applicable aspects of health and safety legislation. Compliance with the provisions of this document shall not relieve the Contractor of any of its responsibilities under the Contract, nor of any obligation imposed upon it by any local law, legislation or regulation. The Contractor shall also ensure the achievement and maintenance of the health and safety standards contained in Approved Codes of Practice, recognised industry guidance and best practice documents.

2.2 CONSTRUCTION WORK

The Employer will advise in the Contract if the work to be carried out is defined as construction work. If the work is defined as construction work, then specific legislation covering construction health and safety may apply. *For example, in the UK the Construction (Design & Management) Regulations will apply and relevant duty holders will be appointed.*

2.3 CONTRACTOR'S REPRESENTATIVE FOR HEALTH AND SAFETY


The Contractor shall nominate a senior person to be accountable for meeting all contractual and statutory obligations for the health and safety of its own and sub-contractor's employees and other persons affected by the Contract work.

2.4 HEALTH AND SAFETY PLAN

The Contractor shall prepare and submit a contract specific health and safety plan. The health and safety plan shall be submitted to the TO at the time stated in the Contract, or if no such time is specified, at least 2 weeks prior to commencement of work on site. The extent of the plan should be appropriate to the nature and complexity of the work to be undertaken. If the Health and Safety Plan is deemed to be insufficient or unsuitable by the Technical Officer, then the Contractor shall modify the plan. The Health and Safety Plan must be accepted by the Technical Officer prior to the work commencing.

The plan should explain in detail how health and safety will be managed during the contract works and make reference to the relevant HSE Guidance. In particular the plan should include: -

- The organisational arrangements, identifying the Contractor's staff to be primarily responsible, for the management of health and safety on site,

	ONSHORE (Europe & APAC) HSE Requirements for Contractors Working on RWE Renewables Onshore : Wind, Solar & Battery Sites Terms & Conditions			Issuing Dept. ANB-EH
	prepared	checked	released	Doc. No.: ANB-EH_HSE001_UK Revision: 0.2 Page: 8/28
				Status : Current Released : August 2019 Review date: August 2021

- The contractor's arrangements for ensuring the competence of employees and subcontractors,
- Arrangements for the site induction training,
- Arrangements for the assessment of risks to health and safety and copies of relevant assessments to be added to the project site folders during the project execution.
- Details of preventative measures for the control of all reasonably foreseeable hazards and hazardous activities that may be encountered during the works, the hazards will include those highlighted by RWE Renewables in the specification together with those that may arise due to the contractor's activities on site. The control measures shall meet the standards laid down in subsequent sections of this document,
- Arrangements for making amendments to risk assessments, method statements and controls following any changes to work plans,
- Details of general health and safety rules to be observed by employees and subcontractors,
- Arrangements for communicating with employees and other contractors on matters affecting their health and safety,
- A list of activities for which individual method statements will be developed and the arrangements for vetting method statements provided by sub-contractors,
- First aid, welfare and emergency arrangements,
- Arrangements for monitoring compliance with health and safety requirements,
- Arrangements for review of the plan

It should be noted that ultimate responsibility to plan for health and safety is with the Contractor. The TO may, for short duration, low risk work, permit the contractor to submit a shortened version of the health and safety plan described above.

2.5 RISK ASSESSMENTS AND METHOD STATEMENTS RA/MS

The Contractor shall prepare and submit to the Employer, and have available on Site, written risk assessments, in accordance with the appropriate legislation, specific to the operations to be carried out. **Please note that risk assessments must be done for all tasks, those that have a significant risk must have written risk assessments.**

Where a **significant** risk is identified, the Contractor shall provide both a risk assessment and a method statement for the work activity. The Contractor shall be able to demonstrate that the risk assessment and method statement has been communicated to the employees and sub-Contractors under its control.

All risk assessments and method statements must be submitted to The Employer 2 weeks prior to the commencement of the work. The Employer reserves the right to comment on any RA/MS prior to acceptance. Where Point of Work Risk Assessments (PoWRA) are authorised and used on site the 2 week advance submission of a PoWRA is not relevant

2.6 COMPETENT HEALTH AND SAFETY ASSISTANCE

The Contractor shall have access to competent health and safety advice appropriate to the work being carried out by the Contractor.

If a resident or visiting safety adviser is specified in the Contract, the Contractor shall submit to the TO for approval, the name of its proposed safety adviser together with a summary of this adviser's competence and relevant site experience.

RWE	ONSHORE (Europe & APAC) HSE Requirements for Contractors Working on RWE Renewables Onshore : Wind, Solar & Battery Sites Terms & Conditions			Issuing Dept. ANB-EH
	prepared	checked	released	Doc. No.: ANB-EH_HSE001_UK Revision: 0.2 Page: 9/28
				Status : Current Released : August 2019 Review date: August 2021

2.7 SUB-CONTRACTING

The Contractor shall be able to demonstrate that he has applied selection procedures that ensure that his sub-contractors are demonstrably competent to perform the works safely.

The Contractor shall provide to the TO the names of sub-contractors proposed to perform work on Site a minimum of 2 weeks prior to such sub-contractor attending Site.

The Contractor retains responsibility for the health and safety plan, the risk assessments and method statements produced by its sub-contractors.

2.8 COMPETENCE

Construction Site Managers shall be in possession of a recognised health and safety site management qualification.

For example in the UK as a minimum at least one of the following H&S qualifications:

- *Institute of Occupational Safety and Health (IOSH) Managing Safely in Construction or Managing Safely – 5 day course*
- *Site Managers Safety Training Scheme (SMSTS) Construction Skills - 5-day course*

Site supervisors and workers must demonstrate H&S competence relevant to their roles and responsibilities. This shall be through the provision of competency cards affiliated with accredited bodies and national organisations

For example, in the UK, CITB, CSCS or recognised industry equivalent.

Trades MUST provide evidence and competence under various relevant national registration schemes.

For example, in the UK these include but are not restricted to the Gas Safe Register, NICEIC, CISRS, IPAF, PASMA, CPCs, NRSWA, NASC, JIB (PMES) PTS etc. Specialist requirement over and above these will be specified in the Contract

When the work involves climbing a wind turbine the Contractor and any sub-contractors must have undergone Wind Turbine Global Wind Organisation (GWO) Basic Safety Training (BST) The training course must be carried out and certified to the Global Wind Organisation (GWO) and recorded on the GWO WINDA training records data base. The training must have a theoretical and practical element to it and cover relevant legislation; work at height hazards; work at height equipment; work at height emergency and rescue techniques


On RWE Renewables Onshore Wind construction sites and operational wind farms the employer / Principal / Main Contractor must ensure that all employees that climb wind turbines (including during construction) have completed the GWO, BST and that all courses are in date and auditable evidence is available on the GWO WINDA data base.

GWO BST course includes:

- GWO Working at Height Course (2 day course, refreshed maximum of every 2 year, refresher course 1 day)
- GWO First Aid Course (2 day course, refreshed maximum of every 2 year, refresher course 1 day)
- GWO Manual Handling Course (½ day course, refreshed maximum of every 2 year, refresher course ½ day)
- GWO Fire Awareness Course (½ day course, refreshed maximum of every 2 year, refresher course ½ day)

Transition period for GWO BST equivalent training: In order to minimise duplicate training a transition period is allowed for existing recognised, accepted, equivalent training up to 31 Dec 20, as long as it meets the following requirements:

- The employer must demonstrate the training is of equivalent standard to GWO.
- The training was completed on or before to the 31 Dec 2018, any training completed from the 01 Jan 19 must be certified to GWO

	<div>ONSHORE (Europe & APAC)</div> <div>HSE Requirements for Contractors Working on</div> <div>RWE Renewables Onshore : Wind, Solar & Battery Sites</div> <div>Terms & Conditions</div>			<div>Issuing Dept. ANB-EH</div> <div>Doc. No.: ANB-EH_HSE001_UK</div> <div>Revision: 0.2</div> <div>Page: 10/28</div>
	prepared	checked	released	<div>Status : Current</div> <div>Released : August 2019</div> <div>Review date: August 2021</div>

- When recognised, accepted equivalent training is due renewal or refreshing it must then be completed to a GWO certified course. Employers should note this may mean staff completing a whole GWO course as opposed to a refresher.

In addition to the Work at Height training there may be additional country specific training requirements for climbing wind turbines. For example, country specific legislation on the Intervals of statutory inspections of climbing equipment differs across Europe / UK between 6 – 12 months.

2.9 SITE INDUCTION TRAINING

All employees of the Contractor, its sub-contractors and other persons attending Site on the Contractor's behalf shall have successfully completed a Site specific health and safety induction training before commencing work on site.

Provision of such training will be by Employer. However, in some instance a contractor may be responsible for carrying out the inductions on Site.

For example, on a UK construction site the CDM Regulations requires that the Principal Contractor is responsible for the Site induction.

Delivery drivers and visitors' induction may be limited to emergency arrangements, PPE requirements, Site rules/hazards etc.

Site inductions must be refreshed at regular intervals, e.g. when hazards change significantly or as a minimum on an annual basis

2.10 INCIDENTS/EMERGENCIES

The Employer categorises incidents as follows:-

Category A Incidents

These must be reported within the hour to:-

The TO responsible for the Contract, or in the UK to the *UK Wind Control Centre on 0800 975 6660 Option 1*

A Category A incident is defined as:


- Serious personal injuries or death
- Significant effects to public safety
- Environmental damages with significant impact
- Security-related incidents with significant impact
- Incidents with a potential to cause high negative publicity

Category B incidents

Information is to be sent by the Contractor within 24 hours to the TO.

A Category B incident is defined as:

- Injuries to any person where lost time > 1 day (24 hrs. or one shift), except Cat. A)
- Environmental incident with little impact
- Security-related incidents with little impact

	ONSHORE (Europe & APAC) HSE Requirements for Contractors Working on RWE Renewables Onshore : Wind, Solar & Battery Sites Terms & Conditions			Issuing Dept. ANB-EH Doc. No.: ANB-EH_HSE001_UK Revision: 0.2 Page: 11/28
	prepared	checked	released	Status : Current Released : August 2019 Review date: August 2021

The Contractor shall also notify the Employer of any near miss event that had potential for injury of loss consistent with Categories A/B outlined above

All other incidents to be reported via normal monthly and/or site reports.

The Contractor must establish systems to ensure appropriate investigation of category A & B incidents as well as other occurrences that present a high potential severity. The investigation must establish basic and root causes and the conclusion, and any recommendations must be shared with the Employer as soon as practicable. All levels of investigation must be completed and submitted to the Employer within 30 calendar days of the incident occurring. Where it is agreed that it is not practical to complete the investigation within 30 days, then interim investigation reports must be complete at a maximum 30 day interval. The Employer reserves the right to conduct their own investigation into any accidents or near misses and the contractor shall cooperate and provide any reasonable requests for information.

Where country specific legislation requires the reporting of incidents to the enforcement authority or similar the contractor shall be responsible for the reporting or ensuring that the reporting has been performed by the relevant responsible person / duty holder. The Contractor will confirm to the Employer in writing that the incident has been reported and provide a copy.

UK: for example, in the UK reporting to the HSE under RIDDOR and ESQCR) of the notification.

The Contractor will devise and administer a near miss/hazard observation reporting scheme for the Site and their work area respectively which includes timely and accurate feedback to the workforce stating the remedial action(s) taken.

2.11 STATUTORY BREACHES

In the event of any visit from an enforcement authority at the Site (e.g. in the UK the Health and Safety Executive, Environmental Agency, Local Authority etc.) the Contractor must immediately notify the Employer of the outcome of the visit and any action taken such as enforcement notices, sanctions etc. and the actions the Contractor intends to take because of the visit. The Contractor must comply with the terms of any notice within the timescales or appeal against the notice.

2.12 EMERGENCY ARRANGEMENTS

The Contractor shall prepare a suitable emergency plan detailing the procedures to be taken in the event of a serious incident. This plan shall be commensurate with the risks and complexity of the work being performed under the Contract and will be agreed with the TO.


If the work involves working at height within the turbine there must be a specific working at height emergency rescue plan. In addition, if the work involves accessing within the hub, blades or basement of the wind turbine the plan must include procedures on rescuing a casualty from those parts of the turbine.

2.13 MONITORING

The Contractor shall monitor its safety performance and that of its sub-contractors to ensure compliance with safety legislation and any other additional requirements set out in the Contract.

The frequency of monitoring will be dependent upon the risk profile and number of persons employed. Part of the monitoring activities must include HSE inspections/audits. The Contractor is to agree an inspection/audit schedule with the TO prior to the work commencing. The Contractor shall provide the TO with verbal feedback immediately after the inspection and a written report no later than 7 working days after the inspection.

The Employer reserves the right to audit all aspects of the management of health and safety on Site at any time.

	ONSHORE (Europe & APAC) HSE Requirements for Contractors Working on RWE Renewables Onshore : Wind, Solar & Battery Sites Terms & Conditions			Issuing Dept. ANB-EH Doc. No.: ANB-EH_HSE001_UK Revision: 0.2 Page: 12/28
	prepared	checked	released	Status : Current Released : August 2019 Review date: August 2021

2.14 REPORTING OF STATISTICS

In addition to reporting of accidents detailed above the Contractor shall submit a Monthly HSE&S Statistics Report to the TO. The requirement to complete this report shall be for contracts where the activity on Site is for one month or more. The information in the report should include the following:

- Total hours worked (including sub-contractors)
- Fatalities/Major injuries
- Over 3 day injuries
- Lost time incidents
- Lost Time Incident Frequency Rate
- Incidents with no lost time e.g. first aid cases, lost time incidents < 1 day
- Dangerous occurrences
- Near Misses
- Other relevant safety information such as toolbox talks, training, safety inspections etc.

2.15 MEETINGS

Following Contract award there will be an inaugural contract meeting with the Contractor to discuss technical aspects of the work as well as health & safety management of the work. This meeting must be held in advance of the work commencing on Site. The Contractor shall attend the inaugural contract meeting. The Employer will minute the meeting and circulate such minutes to all attendees.

Where appropriate prior to work commencing on Site there will be an inaugural Site kick off meeting with the Contractor where details of the Employers Site health & safety expectations will be discussed. The Contractor will present, for inspection by the TO, such copies of personal certificates of competency, test certificates and inspection registers as may be requested (e.g. fork lift truck driver's certificate, special lifting tackle etc.). Minutes of the meeting shall be circulated to all attendees. For contracts over 3 months duration regular site health and safety meetings will be established on Site. The frequency of such meetings will be determined by the nature of the works, associated risks and staff levels but will be at least monthly.

The purpose of the meeting is to discuss, co-ordinate and resolve all health and safety matters of concern on Site and examine current and future activities to ensure a consistently high standard of health and safety on Site.

The TO reserves the right to observe the proceedings of any meetings on Site unless commercially sensitive to the Contractor.

2.16 LANGUAGE

The language on Site will be the local language of the country where the Site is situated, unless otherwise agreed. The Contractor must ensure that their personnel and those of their sub-contractors are able to understand any instructions given in the local / agreed site language. This may be in the form of a supervisor who can translate the instructions. The Contractor must ensure that a supervisor who is capable of understanding both spoken and written instructions is available on Site at all times during the performance of the work. The Contractor is to provide written documents in the language agreed in the contract.

2.17 IMMINENT DANGER

Any representative of the Employer or the Contractor will have the authority to stop work if, in their opinion, it is necessary in the interests of health and safety.

3 SAFE SYSTEMS OF WORK

RWE	ONSHORE (Europe & APAC) HSE Requirements for Contractors Working on RWE Renewables Onshore : Wind, Solar & Battery Sites Terms & Conditions			Issuing Dept. ANB-EH
	prepared	checked	released	Doc. No.: ANB-EH_HSE001_UK Revision: 0.2 Page: 13/28
				Status : Current Released : August 2019 Review date: August 2021

3.1 SAFETY RULES (PERMIT SYSTEM)

When any of the works is connected either temporarily or permanently to a potential energy source (electrical, mechanical or hydraulic) on plant and apparatus directly connected energy production and distribution process, a Safe System of Work (SSoW) is required for all work activities associated with that plant or apparatus including testing. There are two parts to a wind turbine electrical system: the High Voltage side (HV) and the Low Voltage side (LV). The Contractor must have in place a SSoW for working both on HV and LV apparatus. The Contractor should follow industry specific guidance on SSoW which may be country specific e.g. *in the UK when working on the LV side the Wind Turbine Safety Rules (WTSR) should be used.*

The Contractor must work under an approved SSoW (*e.g. in the UK WTSR and HV Safety Rules.*) The Contractor shall have a suitable number of competent staff to carry out the Contractor's tasks/duties. The Contractor shall provide a list of persons whom he considers to be competent with their level of training and authorisation. Where necessary the list will include current local addresses and telephone numbers. The nominated competent persons and the SSoW shall be subject to the TO's approval. Where the Contractor's staff have not reached the required standard, then they will be required to attend an appropriate training course at the Contractor's expense. The final decision regarding accreditation for competence rests with the Employer.

The persons nominated by the Contractor must be able to read, write and speak the local / agreed site language to enable them to be capable of receiving and understanding safety documents.

The tools and equipment that are used on electrical systems must be suitable, sufficient and must meet industry standards (*In the UK these standards are HSE GS38, BS EN 61010 and BS EN 61243-3.*).

3.2 GENERAL SAFETY

The Safety Rules (*e.g. in UK the WTSR and HV Safety Rules*) only address safety from the inherent hazards in the energy production and distribution process. The responsibility for putting a person to work and controlling the risks associated with the method of working rests with the Contractor and its supervisors. This extends to ensure that work activities are adequately planned and executed in such a way that working parties do not adversely interfere with, or affect, other parties working in the same vicinity. For construction sites it is the responsibility of the Main / Principal Contractor to ensure that permit systems are suitable and sufficient for the works that is to be undertaken. These permits may cover arrange of work activities (Excavations, hot works, confined spaces etc.).

4 GENERAL HEALTH, SAFETY AND ENVIRONMENT – CONTRACTORS AT WORK

4.1 WORK EQUIPMENT

The Contractor must ensure that all equipment brought to Site is in good condition, is maintained in good condition, complies with the requirements of any country specific legislation for work equipment


(e.g. in the UK the Provision and Use of Work Equipment Regulations (PUWER)); any other specific legislation and is used and maintained safely.

The Contractor shall provide health and safety data on all plant and equipment that they supply or use on site. This data will include risk assessments for the plant/equipment, DoC certificates and emission levels (vibration, EMF, noise etc.).

Any equipment not compliant with legislation will not be allowed to be used on Site

4.2 PERSONAL PROTECTIVE EQUIPMENT

Personal protective clothing and equipment must be provided and maintained by the Contractor in accordance with any country specific regulations (*e.g. in the UK the Personal Protective Equipment at Work Regulations*). The Contractor must

	ONSHORE (Europe & APAC) HSE Requirements for Contractors Working on RWE Renewables Onshore : Wind, Solar & Battery Sites Terms & Conditions			Issuing Dept. ANB-EH
	prepared	checked	released	Doc. No.: ANB-EH_HSE001_UK Revision: 0.2 Page: 14/28
				Status : Current Released : August 2019 Review date: August 2021

ensure that its workforce have received appropriate training in the use of the PPE and that PPE equipment is properly used.

4.3 FIRST AID

On RWE Renewables Onshore construction sites, the Principal or Main Contractor must assess the requirements for the number of first aiders on Site. As well as ensuring there are adequate first aid facilities on Site the Contractor must ensure that for Sites more than 30 minutes by car from an Accident & Emergency Hospital that they provide an Automated External Defibrillator during the performance of the work.

Contractors working on an operational wind farm or during the erection and commissioning of a wind turbine must ensure that at least two of the climbing party are trained in first aid when climbing. The first aiders shall be trained to the Global Wind Organisation (GWO) First Aid in Wind Turbines standard or equivalent. The contractor is responsible for supplying and maintaining the emergency equipment required for evacuating an injured person and any other first aid provisions that are required.

4.4 FITNESS TO WORK

The Employer requires that those climbing a wind turbine are medically fit to climb. The Contractor must ensure that persons climbing a wind turbine have undergone a medical and certified as fit to work. The medical must be either *Renewables UK* medical fitness to work or the G41 medical.

Oil & Gas medicals will also be accepted however once this expires it should be replaced by the Renewable UK medical for work in the UK.

If the Contractor's workers are from a different country the country specific medical standard for work at height medicals will be accepted provided there is documented evidence.

The Contractor must also ensure that those carrying out specific tasks are fit for work. For example, those working in confined spaces and crane drivers must have a medical certifying them fit for that work.

4.5 HOUSEKEEPING

Contractors must keep their working area clean and tidy and clear of obstructions. All floors and walkways must be kept clear of materials in order that a secure footing can be maintained and to ensure that build-up of flammable or other hazardous materials does not occur. The Contractor shall ensure that safe means of access to and egress from the work place are provided and used.


4.6 ENVIRONMENT

For construction work activities, it will be the responsibility of the Main/Principal Contractor to ensure that where necessary all environment licences, permits and exemptions are obtained. Where a permit/licence already exists for a Site, it may be possible to use these to cover the construction work activity. However, if it is not possible to use the existing permits/licences or where no permits/licences exist, then it will be the responsibility of the Contractor to ensure that these are obtained, and any fees are paid for by them. Unless explicitly allowed in writing, activities outside the designated working area are forbidden.

The Contractor shall at all times ensure that suitable precautions are taken so as not to pollute the atmosphere, ground or waters. The Contractor shall also be familiar with the actions required to control spills and releases to the atmosphere.

Where necessary the Contractor must ensure suitable precautions are in place not to harm flora and fauna on site.

The Contractor shall also be familiar with the actions required to control spills and releases to the atmosphere and shall be at all times compliant with the applicable licences/permits.

	ONSHORE (Europe & APAC) HSE Requirements for Contractors Working on RWE Renewables Onshore : Wind, Solar & Battery Sites Terms & Conditions			Issuing Dept. ANB-EH Doc. No.: ANB-EH_HSE001_UK Revision: 0.2 Page: 15/28
	prepared	checked	released	Status : Current Released : August 2019 Review date: August 2021

Spill kits and other equipment to mitigate the consequences of a spill should be made readily available by the Contractor during the performance of the work.

The Contractor shall ensure that they and their employees are aware of existing land uses on Site and should be outlined in the employers, site induction defined in section 2.9. The Contractor shall ensure that their work does not adversely affect the existing land use e.g. farming.

For sites in the UK the relevant pollution prevention guidelines must be implemented and adhered too.

4.7 WASTE

The Contractor must ensure that any waste generated by their activities is disposed of safely and by a licensed waste carrier. Any waste that contains hazardous materials must be segregated and disposed of as hazardous waste. This will include oils and greases etc. as well as rags or clothes which are contaminated with oils and greases. Copies of waste transfer notes etc. must be kept for audit purposes. For construction sites, the Main/Principal Contractor must produce and maintain a Site Waste Management Plan.

4.8 RECORD OF ATTENDANCE

The Contractor shall ensure that **all its employees or those of sub-contractors record their attendance on Site daily** in order that numbers can be satisfactorily accounted for in the event of fire or other emergency.

For countries with a Control Room and when visiting an operational Onshore site or a site under development the Contractor must book on and off Site with the Control Room

In the UK the UK Wind Control Centre on – 0800 975 6660

4.9 CONDUCT ON SITE

The Contractor shall ensure that its employees conduct themselves in a fit and proper manner whilst on Site. Failure to do this may result in the removal or exclusion of such persons from the Site.

It is the Contractor's responsibility to ensure that their staff and sub-contractors are fit to carry out their duties and that they are not negatively affected by alcohol, illegal or legal drugs (prescription or over-the-counter medicines).

No drugs or Alcohol to be brought to or consumed on Site. Persons attending Site shall not be under the influence of drugs or alcohol.


4.10 LONE AND REMOTE WORKING

Lone working should be avoided. However, where it is not reasonably practicable to avoid lone working and agreed in writing with the TO lone working may be considered. The Contractor shall provide a risk assessment, detailing safety arrangements for all lone working.

Suitable communication and emergency arrangements shall be provided by the Contractor to ensure the health, safety and welfare of personnel when lone working.

4.11 WORK ON BUILDING STRUCTURE

No work shall be carried out on any building structure without the prior consent of the TO. Prior to any work taking place the scope of work, the effect of the work on the integrity of that structure, access arrangements, methods of working, materials to be used and any materials that may be disturbed by work must be agreed in writing with the TO.

	<div>ONSHORE (Europe & APAC)</div> <div>HSE Requirements for Contractors Working on</div> <div>RWE Renewables Onshore : Wind, Solar & Battery Sites</div> <div>Terms & Conditions</div>			<div>Issuing Dept. ANB-EH</div> <div>Doc. No.: ANB-EH_HSE001_UK</div> <div>Revision: 0.2</div> <div>Page: 16/28</div>
	prepared	checked	released	<div>Status : Current</div> <div>Released : August 2019</div> <div>Review date: August 2021</div>

4.12 WORK AT HEIGHT

Before working at height, a suitable and sufficient risk assessment shall be carried out. This will include consideration of the need for working at height, details of the SSoW at height, and the provision of fall prevention equipment as necessary.

When working at height cannot be avoided e.g. when working and climbing within a wind turbine the Contractor must ensure that their employees and those of their sub-contractors have been suitably trained in Work at Height & Rescue in wind turbines.

When climbing a wind turbine there should be only one person on one ladder section at a time and hatches on each level where fitted as part of the turbine design should be closed once passed through. Where there is risk of a fall each person must be suitably attached to an anchor point.

Emergency plans must be in place where fall arrest equipment is used.

Measures must be taken to prevent the falling of materials and other items that could place persons at risk when beneath the area of work. The risk assessment should give consideration whether the area beneath the work activity should be physically protected by barriers or be boarded. **This is mandatory if you cannot prevent materials falling.**

The Contractor shall display notices, warning of overhead work and barriers at ground level as appropriate.

4.13 FLOORS

If floor sections or grating have been removed e.g. in a substation building floor, substantial secure barriers must be erected around any floor opening. Suitable visual warnings, notices by day and suitable lamps during hours of darkness, shall be displayed. Adequate precautions must be taken to prevent danger to persons at lower levels.

All floor sections removed must be replaced and secured as soon as practicable. Should any floor sections be broken, immediate steps must be taken to prevent danger pending their replacement.

4.14 WELFARE FACILITIES

As well as complying with any country specific regulations (*e.g. in the UK the CDM Regulations or Workplace Health, Safety & Welfare Regulations*) the Contractor is required to leave the Site, all accommodation, and adjacent access areas in a clean and tidy condition throughout the duration of the works.

It shall be the responsibility of the Main/Principal Contractor to provide appropriate welfare facilities for their staff and any sub-contractors on site.


Where the Contractor is responsible to supply welfare facilities, the employer shall ensure that their personnel have access to suitable welfare facilities. The Employers facilities available to the Contractor shall be those set out in the Contract.

Caravans are not permitted on the Site.

Personnel are not permitted to stay on the Site overnight unless they are part of an agreed security regime or performing other working duties with the Employer's prior written agreement.

All Contractor accommodation must bear an approved notice board carrying: -

- Company name.
- Project name
- Postal address of main office.
- Telephone number of main office and an Emergency contact number

	ONSHORE (Europe & APAC) HSE Requirements for Contractors Working on RWE Renewables Onshore : Wind, Solar & Battery Sites Terms & Conditions			Issuing Dept. ANB-EH
	prepared	checked	released	Doc. No.: ANB-EH_HSE001_UK Revision: 0.2 Page: 17/28
				Status : Current Released : August 2019 Review date: August 2021

4.15 SECURITY

On construction sites the Principal/Main Contractor is responsible for the security on Site. The Contractor should assess the Site and what security arrangements should be in place. The assessment must consider not only theft, vandalism, graffiti etc. but also unauthorised access and in particular children accessing site.

When work is taking place on an operational Onshore site the Contractor is responsible for ensuring that each asset (e.g wind turbine, battery storage) is and any auxiliary buildings (i.e. control room/substation) are locked and secured. The Contractor should also ensure that any gates are closed at all times.

5 BARRIERS, GUARDS, SCREENS AND NOTICES

Wherever barriers, guards and screens are erected, the Contractor shall display suitable notices to denote the hazard within the restricted area. These shall conform to any country specific requirements

In the UK the Health and Safety (Safety Signs and Signals) Regulations and relevant British Standard (i.e. pictorial where required)).

The Contractor must not move any barriers, guards, screens or notices erected by others without the permission of the TO and the contractor/person responsible for the barrier. In particular the Contractor must not remove any guards on machinery which will expose moving parts without the consent of the TO. The removal of guards exposing moving parts should only be done in exceptional circumstances and a documented risk assessment must be in place detailing the control measures against the hazards of moving machinery.

No substation boundary fence or the ground adjacent to the fence shall be disturbed without permission of the TO.

No parking is allowed within 1m of a substation fence

6 EXCAVATIONS

The Contractor shall not carry out any excavation work on the Employers operational sites without consulting the TO. Excavation work on the Employers construction sites will fall under the control of the Principal/Main contractor but the requirements set out below should still be followed. Prior to the commencement of any excavation work, the position of all underground services must be established and physically marked as appropriate. The Contractor must follow industry guidance.


For example, in the UK Avoiding Danger from Underground Services (HSG47), BS6031 Code of Practice for Earthworks, HSG151 Protecting the Public and HSG150 Health and Safety in Construction

On development and operational sites breaking the ground is classified as excavation work.

For excavation work on an Onshore site a request to break ground must be requested by the Contractor from the TO. Once all the requirements of the request to break ground have been met, the Contractor can commence the excavation work.

The Contractor must risk assess all excavations and provide appropriate edge protection, which must be agreed to by the TO. Where appropriate the contractor shall display excavation signage (pictorial and written signage) on the edge protection. Where the site is poorly lit, or the excavation is in close proximity to traffic routes then these barriers should be easily seen and should be retroreflective or have retroreflective material on them. The barriers must be appropriate for the site and the hazard it is guarding (e.g. the wind class of the barrier (UK Standard -BS 8442)).

The Contractor must ensure that the excavation is safe from collapse. Where necessary the sides of the trench should be supported by the use of trench box, sheet piles or similar standards.

	ONSHORE (Europe & APAC) HSE Requirements for Contractors Working on RWE Renewables Onshore : Wind, Solar & Battery Sites Terms & Conditions			Issuing Dept. ANB-EH
	prepared	checked	released	Doc. No.: ANB-EH_HSE001_UK Revision: 0.2 Page: 18/28
				Status : Current Released : August 2019 Review date: August 2021

7 SCAFFOLDING AND SAFE MEANS OF ACCESS

7.1 GENERAL

Temporary means of access and scaffold structures shall comply with the requirements of country specific regulations and industry guidance

*In the UK the Work at Height Regulations; Provision and Use of Work Equipment Regulations and **constructed in accordance with NASC guidance TG20:13** must be adhered too.*

Scaffolders and scaffold inspectors employed by the Contractor must be trained under nationally recognised certification schemes

For the UK, scaffolders must have a competency card accredited by either the CITB Construction Industries Scaffolders Record Scheme (CISRS) or National Access and Scaffolders Confederation (NASC).

For designed scaffold a site specific, method statement and risk assessment must be submitted at least 7 days prior to commencement on Site. These documents will be reviewed by the TO and any reasonably requested amendments must be made to the documentation before work commences on Site.

The method statement **must include**:

- details of supervision that will be allocated to Site,
- qualifications of all scaffolders allocated to the project,
- details of procedures for the rescue of an individual who has fallen and is suspended in their harness,
- strength and stability calculations in accordance country specific guidance e.g. TG20:13 for the UK
- any location where a safety net will be attached to the structure (if applicable).

The Contractor shall allow for staircase structures to be built into the scaffold when the it is more than 2 lifts high. Where this is not practicable, the Contractor shall highlight these locations in the Contract.

Where structures cannot be accessed by a stair tower, the Contractor must include a self-closing gate system at all ladder access points.


7.2 INSPECTIONS / SCAFFOLD TAGS / HANDOVER AND CERTIFICATION

Scaffolds and staircase structures shall be supplied with a scaffold tag indicating erection and inspection dates. The tags must be fitted at all access points onto the scaffold / staircase.

The Employer requires a handover certificate to be issued upon completion of the structure or phase to which the certificate applies. Any scaffold which remains erected for more than one week should be inspected every 7 days; after bad weather which may have an effect on strength and stability and after any major alterations. The inspection is to be carried out by a competent person and a register of such inspection(s) to be retained on site for inspection by the Employer if requested.

After alterations the Contractor must display on the scaffold a 'DO NOT USE' sign until it has been inspected and accepted as a safe structure. Under no circumstances will any person, other than the appropriate scaffolding competent person, alter a scaffold.

Scaffolding adjacent to exposed high voltage conductors shall only be erected and used and moved after the risks have been assessed and a SSoW is in place.

	ONSHORE (Europe & APAC) HSE Requirements for Contractors Working on RWE Renewables Onshore : Wind, Solar & Battery Sites Terms & Conditions			Issuing Dept. ANB-EH
	prepared	checked	released	Doc. No.: ANB-EH_HSE001_UK Revision: 0.2 Page: 19/28
				Status : Current Released : August 2019 Review date: August 2021

Any Contractor wishing to make use of scaffold not erected by themselves or their sub-contractor must ensure that permission has been granted by the Principal/Main Contractor for construction sites or the TO for operational sites and that the structure will support the loads to be imposed.

7.3 LADDERS AND STEPS

Ladders and steps should only be used for access and short duration work and only after a specific risk assessment has demonstrated that use of more suitable work equipment cannot be justified.

All ladders and steps used by the Contractor must be in a good condition and of the correct classification. **Class 3 ladders are strictly prohibited from use.** Class 1 ladders are preferred and EN131 ladders are acceptable only for commercial or light industrial use.

Where the ladder is being used to access and work on live electrical circuits or where there is a risk of electrocution then glass reinforced plastic ladders must be used.

All ladders and steps must be checked to ensure their proper condition in accordance with the various applicable regulations. These checks shall be documented and made available to the TO.

8 LIFTING TACKLE, LIFTING APPLIANCES (MACHINES) AND HOISTS

Lifting tackle, lifting appliances (machines) and hoists, hereafter described collectively as "lifting equipment", shall comply with the requirements of the relevant country specific regulations and Code of Practice.

For example, in the UK the Lifting Operations and Lifting Equipment Regulations (LOLER); the Provision and Use of Work Equipment Regulations, (PUWER) and BS 7121 The Code of Practice for the Safe Use of Cranes.

Only properly tested and marked lifting equipment may be used. The Contractor must satisfy the TO that all lifting equipment complies with the relevant standards and shall make available certificates and inspection records upon request. The Contractor must maintain a system for managing the inspection and thorough examination of all lifting equipment, *in the UK this would be as per LOLER inspection requirements.*

Lifting equipment must be kept under strict control and not be left lying about on site.


Prior to any lifting operation a suitable lifting plan shall be prepared by a competent person with a level of detail commensurate with the nature of the lift (i.e. complexity, weight, travel distance, the weather etc.). The lifting plan should be supported by the necessary additional documents i.e. ground stability tests.

RWE Renewables and any appointed Principal / main Contractor must be able to monitor the lifts in order to complete their duty holder roles and responsibilities. This may include being considered part of the working party and entering the lifting exclusion zone in order to fulfil their legal duties e.g. monitoring and compliance. In order to complete monitoring duties in a safe manner the lift plan, lift risk assessment and method statement should address a safe method of monitoring within the exclusion zone and the contractor shall make available any additional resource or provisions that they feel is necessary.

The lift contractor should give as much advance notice as possible of all potential lifting operations with a minimum of 24 hours' notice of a potential lift, in turn RWE Renewables and the Principal / main Contractor will give 24 hours' notice of their intention to carry out monitoring and compliance of the lift.

For the UK the lift plan must be produced in accordance with LOLER and BS 7121. Such plans shall be readily available for inspection by the TO.

A gap of at least 1m must be maintained between any slewing lifting equipment and other structures/objects. Where this minimum gap cannot be achieved, rigid barriers with warning signage must be in-situ prior to commencing lifting operations.

	ONSHORE (Europe & APAC) HSE Requirements for Contractors Working on RWE Renewables Onshore : Wind, Solar & Battery Sites Terms & Conditions			Issuing Dept. ANB-EH
	prepared	checked	released	Doc. No.: ANB-EH_HSE001_UK Revision: 0.2 Page: 20/28
				Status : Current Released : August 2019 Review date: August 2021

Where excavators are used to lift suspended loads above 1 tonne, the hydraulic rams must be fitted with 'catch-valves', so that in the event of the hydraulic system failing, the machine will 'fail-safe'.

Hooks of lifting equipment or accessories must have a safety catch.

The use of "C-hooks" is prohibited.

Where temporary or permanent structures are used for lifting they must be proven to be of sufficient load bearing capacity to support lifting operations.

For simple lifts (*as defined in UK LOLER ACOP*) - using telehandlers and excavators - a simple lift plan and risk assessment is sufficient. This must be recorded and available for inspection.

Whenever lifting operations are in progress, the areas immediately below the operation and adjacent to winching equipment shall be suitably segregated by barriers and policed as necessary. When there are lifting operations taking place the Contractor must ensure that this is communicated to others on site in advance of any lifting taking place.

9 GENERAL

9.1 ELECTRICAL

Electrical equipment must be suitable for its working environment and tested in accordance with the applicable country specific guidance or regulations

For example, in the UK, BS7671, HSE publication HSG107 And HSG141 'Electrical safety on construction sites'.

9.2 INSPECTION AND TESTING

Portable tools, hand lamps and other portable apparatus must be identified by a serial number, registered and periodically inspected as recommended

For example, in the UK in HSE guidance. All such equipment used by Contractors shall have a current test certificate of electrical safety.

Any equipment not marked in accordance with the above will not be allowed to be used on site.

9.3 CONNECTIONS

Temporary electrical installations - including distribution boards, cabling and switchgear - shall comply with the current issue of the country specific regulations.


For example, in the UK the I.E.E. Wiring Regulations and be installed and connected by a competent person.

The installation may be subject to inspection by the Employer prior to connection to the live operational site supplies and systems.

9.4 PORTABLE ELECTRICAL TOOLS

Where reasonably practicably the Contractor shall use battery operated portable electrical tools. If this is not possible all mains portable tools, hand lamps and other portable apparatus (see below for preferences as to voltages etc.) must be connected to the system by plugs and sockets that meet the standards for that particular country. Tools and chargers with European two pin type plugs may only be used in the UK with an approved CE marked adapter and vice versa. The plugs must be such that they can only be inserted in the correct outlet for any particular voltage.

All portable electric tools and equipment, except for the tools referred to in the next paragraph must be connected by **3-core** flexible cable which must be in good condition and suitably protected against mechanical damage.

	ONSHORE (Europe & APAC) HSE Requirements for Contractors Working on RWE Renewables Onshore : Wind, Solar & Battery Sites Terms & Conditions			Issuing Dept. ANB-EH
	prepared	checked	released	Doc. No.: ANB-EH_HSE001_UK Revision: 0.2 Page: 21/28
				Status : Current Released : August 2019 Review date: August 2021

All-insulated and double-insulated tools may be connected by 2-core flexible cable that must be in good condition and suitably protected against mechanical damage.

Cable routes shall be arranged such that the risk of damage is minimised, and that the run does not in itself create any hazard such as obstruction, tripping, fire etc.

All joints must be both electrically and mechanically sound — **twisting of conductors or taping will not be permitted.**

9.5 EARTHING AND VOLTAGE LIMITS

Hand held portable electric tools must normally be double-pole switched and operated at not more than 110 V ac, the supply must be derived from double wound transformers having the centre point of the secondary winding connected to earth. The Contractor must provide such transformers.

Where special tools or equipment require a supply above 110 V special authorisation must be obtained from the TO and a residual current device (RCD), provided by the Contractor, must be connected in the circuit.

9.6 HEATERS

Electric heaters or radiators having exposed heating coils or elements must not be used on Site.

10 HOT WORKING

10.1 GENERAL

Hot working includes welding, burning, and any activity that creates a source of ignition or combustion which may include grinding and cutting.

Contractors shall include an assessment of fire risk as part of their general risk assessment for any hot works activities. The Contractor must comply with these documents.

Suitable screens or mats must be used to limit or prevent the spread of by-products of hot working. The Contractor shall supply suitable and sufficient fire extinguishers or fire blankets which will be readily usable at the point of work.

An RWE Renewables Hot Work Permit/Certificate granting consent for hot working may be required prior to the commencement of hot work on operational sites. This will be confirmed by the TO. For construction sites this work will be under the control of the Principal/Main Contractor.

10.2 WELDING

The connections must be sufficient in size for the duty to be performed, properly protected against mechanical damage and in good condition.

10.3 GAS WELDING OR BURNING

Acetylene will only be permitted for use when there is no suitable alternative.


Trailing hoses must be positioned so as not to create a hazard and should be physically protected as necessary. *For the UK gas cylinders must be fitted with flashback arrestors conforming to the current British Standards Specification.*

Gas cylinder valve keys shall be readily available at the cylinder to enable speedy closing of the valve in the event of fire.

Welding equipment must be isolated at the end of each work period.

10.4 USE OF ARC WELDING EQUIPMENT

A sufficient number of fixed screens shall be provided to protect persons from exposure to electric arc flash.

	ONSHORE (Europe & APAC) HSE Requirements for Contractors Working on RWE Renewables Onshore : Wind, Solar & Battery Sites Terms & Conditions			Issuing Dept. ANB-EH
	prepared	checked	released	Doc. No.: ANB-EH_HSE001_UK Revision: 0.2 Page: 22/28
				Status : Current Released : August 2019 Review date: August 2021

When the welding process uses inert gas shielding, the Contractor shall ensure that there is adequate ventilation to remove the asphyxiation risk from the inert gas.

Welding equipment shall be isolated when not in use.

11 ASBESTOS

Asbestos may be present in buildings and insulation materials. The Employer will advise the Contractor if there is any known asbestos in their working area. However, if the Contractor has any concerns during the work - for example disturbing ceiling tiles or other insulation materials – then the Contractor must stop the work immediately and report the concern to the TO.

12 LEAD

Lead may be present in many installations from painted surfaces on older sites to lead flashings. The Employer will advise the Contractor if there is any known lead in their working area however, if the Contractor has any concerns during the course of the work the work should be stopped, and the concerns raised with the TO.

If lead has been identified the Contractor shall carry out its own assessment of the work and prepare a method statement incorporating the appropriate control measures that must be implemented.

13 SAFE WORKING WITH HAZARDOUS SUBSTANCES

Prior to the commencement of any work requiring the use of hazardous substances the Contractor shall carry out an assessment in accordance with the applicable country specific legislation, *for example in the UK the Control of Substances Hazardous to Health (COSHH) Regulations* and prepare a method statement that incorporates suitable control measures to reduce the risk of exposure to employees and others. For Onshore operational sites the Contractor shall provide the Employer with copies of these COSHH assessments. For Onshore constructions sites, the Principal/Main contractor will be responsible for ensuring these are in place.

It should be recognised that Material Safety Data Sheets are not COSHH assessments but an input into an assessment.

14 VEHICLES, MOBILE PLANT & MOBILE CRANES

14.1 VEHICLES AND MOBILE PLANT

Drivers of vehicles and mobile plant must be adequately trained and have written authorisation to use the vehicles.

Vehicles and mobile plant should be driven carefully at all times, keeping to Site speed limits and obeying traffic signs and signals. Drivers must pay particular attention when reversing to ensure that nobody is in danger. Vehicles and mobile plant should only park in the areas designated.


All mobile plant (including Fork Lift Trucks) shall be fitted with both visual warning (e.g. flashing yellow beacons) and audible warning devices. The Contractor shall take reasonable steps to ensure unauthorised persons cannot use vehicles and mobile plant.

The Contractor shall ensure that any plant brought to site is regularly inspected maintained and complies with the applicable country specific regulations such as *PUWER or LOLER in the UK*.

Where vehicles are to be used in the vicinity of overhead power lines the Contractor must not start work until suitable control measures are in place to prevent coming into contact or near the overhead lines. Country specific guidance shall be followed.

For example, in the UK the HSE's GS6 Avoidance of Dangers from Overhead Electric Power lines.

The use of Quad bikes is specifically prohibited.

	ONSHORE (Europe & APAC) HSE Requirements for Contractors Working on RWE Renewables Onshore : Wind, Solar & Battery Sites Terms & Conditions			Issuing Dept. ANB-EH
	prepared	checked	released	Doc. No.: ANB-EH_HSE001_UK Revision: 0.2 Page: 23/28
				Status : Current Released : August 2019 Review date: August 2021

14.2 MOBILE CRANES

No mobile crane, or similar lifting device, may enter the Site without the permission of the TO for operational sites or the Principal/Main Contractor for construction sites. The Contractor shall ensure that any mobile crane brought on Site - whether owned or hired by the Contractor - has appropriate test certification and reports of thorough examinations and inspections. Crane drivers, crane supervisors and slingers/signallers shall be trained, competent and have available a certificate of competence issued by recognised training scheme

For example, in the UK the Construction Industry Training Board (CITB) or similar organisation acceptable to the TO.

All certification and reports for the crane and personnel shall be available to the TO on request.

The Contractor shall carry out all work with cranes in accordance with the country specific regulations such as *Lifting Operations and Lifting Equipment Regulations (LOLER) in the UK*.

The Contractor shall ensure that all lifting operations are planned before the operation begins. Such plans will be completed by a competent person to a level of detail commensurate with the complexity, weight etc. of the lifting operation and the associated risks. The Contractor must always ensure that there is sufficient means of communication between both the crane operator and the signaller (banksman). The signaller must be easily identifiable amongst the other workers (for example the signaller may wear a different coloured hi-vis or helmet).

Particular note should be made of load capacities underground structures – such as tail race and underground pipeline crossings – when planning lifts.

15 CONFINED SPACES

The TO will advise the Contractor in the Contract of any enclosed work area which is deemed by the Employer to be an actual or potential confined space. If the Contractor's risk assessment shows that an area is an actual or potential confined space as defined in country specific regulations such as the *Confined Spaces Regulations in the UK* - either resulting from the in-service conditions or created by the work or any substances to be used - then a suitable SSoW shall be agreed. This may include preparation and issue of a permit if the confined space hazard is process derived.

The Contractor shall not enter any confined space without first contacting and obtaining the written permission of the TO for Onshore operational sites. For construction sites the decision on whether it is a confined space rests with the Principal/Main Contractor. In some circumstances the confined space may also be covered by the LV or HV Safety rules and the Contractor must ensure that the applicable control documents are in place.

16 FORESTRY AND ARBORICULTURAL WORK

Contractors that carryout forestry work must be competent for the work activities including a health and safety accredited management system that covers forestry/arboricultural activities in the scope of the management system.


For example, in the UK for arboricultural work the contractor shall be an approved contractor under the Arboricultural Association (ARB approved contractor scheme) for the work they intend to undertake. Any deviation from this must be agreed in writing with the Technical Officer.

In the UK all works shall be carried out in accordance with Forestry Industry Safety Accord 'FISA' Guidance and the Arboricultural and Forestry Advisory Group 'AFAG' guidance.

Contractors that operate forestry machinery (mulcher, forwarders, chainsaws etc.) must have obtained the relevant nationally recognised qualification or competency card.

For example, in the UK, NPTC/City&Guilds, CPCs Certificates. Where no expiration date is shown or is available, then refresher training must be conducted every 3 to 5 years for practical skills-based training/qualifications.

Supervisors/Managers should hold an appropriate managerial/supervisory qualification.

	ONSHORE (Europe & APAC) HSE Requirements for Contractors Working on RWE Renewables Onshore : Wind, Solar & Battery Sites Terms & Conditions		Issuing Dept. ANB-EH Doc. No.: ANB-EH_HSE001_UK Revision: 0.2 Page: 24/28
	prepared	checked	released
			Status : Current Released : August 2019 Review date: August 2021

In the UK this could be the appropriate CSC Card for the work, Royal Forestry Society (RFS) qualification, C&G qualification etc. The contractor must also possess the correct experience and knowledge for the position.

17 LEGIONNELLA LEPTOSPIROSIS AND LYMES DISEASE

Leptospirosis, also known as "Weil's Disease", is a risk when working in damp conditions with possible rat infestation. Contractors should assess the risk on Site and ensures that site operatives are given appropriate briefing and information on risk management. In addition, the Contractor assesses the risk for their work activities.

Lyme disease is an infection that can be transmitted through a tick bite. The Contractor must ensure that site operatives are given appropriate briefing and information on risk management.

In the UK this is very prevalent in sites in Scotland and North Wales.

Legionnaires' disease is a type of pneumonia caused by bacteria. You usually get it by breathing in mist from water that contains the bacteria. Contractors must ensure water systems are designed and installed to ensure country compliance.

In the UK this would be with the Approved Code of Practice and Guidance L8 and that construction sites have adequate preventative controls in place. A legionella risk assessment must be available from contractors in respect of site welfare cabins

18 FLAMMABLE LIQUIDS AND GASES

Any flammable liquids and gases planned to be brought to, and stored onsite, will be discussed and agreed with the TO. The Contractor shall provide a suitable storage area and such materials must not be stored anywhere else on the Site. Any such area shall be in accordance with country specific guidance *for example in the UK HSE Approved Code of Practice L 135 – "Storage of Dangerous Substances"*. Suitable fire mitigation arrangements will be made by the Contractor.

These requirements apply to all flammable materials e.g. acetylene, propane, petroleum, diesel fuel.

It is a requirement of the Employer that flashback arresters must be fitted to ALL flammable gas containers.

19 PROTECTIVE EQUIPMENT AND CLOTHING

The Contractor shall provide, use and maintain personal protective equipment and clothing as deemed necessary from the risk assessment of the work activities planned and with respect to the Employers site rules and other requirements set out in the Contract.

All PPE must comply with the relevant statutory requirements and EN standards.


The following specific requirements apply: -

Open Water - when working near open water, approved life preserving jackets shall be provided and worn.

Minimum PPE - wind turbine;

When ascending/descending in a wind turbine the following PPE must be worn;

- Full body harness (EN361/EN358)
- Double Twin Tail Lanyard (Shock absorbing – EN355)
- Work positioner (EN358)

	ONSHORE (Europe & APAC) HSE Requirements for Contractors Working on RWE Renewables Onshore : Wind, Solar & Battery Sites Terms & Conditions			Issuing Dept. ANB-EH
	prepared	checked	released	Doc. No.: ANB-EH_HSE001_UK Revision: 0.2 Page: 25/28
				Status : Current Released : August 2019 Review date: August 2021

- Slider (EN353)
- Climbing Hard Hat (EN12492 & EN397) with head torch
- Safety Boots with good ankle support.

Personal Fall Protection Equipment – the Employer has the following requirements regarding PFPE:

- Triple action double locking carabiners (EN362) should be used on all connection points onto the harness such as work restraint and fall arrest lanyards
- Double action single locking carabiners are only permitted when they form part of an existing vertical fall arrest system such as Latchways, Cabloc etc.
- Non-locking or single locking carabiners are not permitted under any circumstances

RWE Renewables UK standards for PPE and training.

RWE Renewables UK have set PPE standards and training for all their staff. Where Contractors require RWE Renewables UK staff to have additional training or PPE outside of RWE standards, then these are to be provided at the Contractors expense.

20 NOISE

Although the operation of Onshore sites does not generally generate enough noise to require hearing protection there may be specific tasks during the construction and maintenance of an Onshore site that require hearing protection. The Contractor shall notify the TO before bringing on to any operational Onshore site any plant or equipment that is likely to significantly increase overall site noise levels. In this situation, a suitable risk assessment shall be carried out and where appropriate, additional controls defined and applied.

21 HIGH PRESSURE WATER WASHING AND STEAM CLEANING

The Contractor may only use high pressure water washing apparatus with permission of the TO.

The Contractor must have available for inspection by the TO records of operator training and certification for the proof testing of pressurised equipment. Protective measures such as personal protective equipment, screens and barriers shall be detailed in the relevant risk assessment/method statement. Waste water from such activities shall be controlled in line with local Site procedures.


22 HIGH VOLTAGE ENCLOSURES

Ladders, long objects and cranes must not be used in the vicinity of, or transported close to, exposed high voltage electrical conductors without consultation with the TO.

Within areas containing exposed high voltage conductors, **metal measuring tapes shall only be used when authorised in writing by the TO.**

23 FIRE

The Contractor shall ensure that they and their employees are familiar with local fire procedures on site and ensure that its personnel are suitably instructed as to the content as outlined in the employers / site induction defined in section 2.9

	<div>ONSHORE (Europe & APAC)</div> <div>HSE Requirements for Contractors Working on</div> <div>RWE Renewables Onshore : Wind, Solar & Battery Sites</div> <div>Terms & Conditions</div>			<div>Issuing Dept. ANB-EH</div> <div>Doc. No.: ANB-EH_HSE001_UK</div> <div>Revision: 0.2</div> <div>Page: 26/28</div>
	<div>prepared</div>	<div>checked</div>	<div>released</div>	<div>Status : Current</div> <div>Released : August 2019</div> <div>Review date: August 2021</div>

Unless otherwise agreed, the Main/Principal Contractor on a site/premises, shall be responsible for ensuring that the fire risk assessment is completed. The Contractor shall provide any mitigation measures that are detailed in the fire risk assessment.

All heaters must be of intrinsically safe design.

Flammable materials necessary for working shall be kept to a minimum and shall be stored in suitable areas and in such conditions as approved by the TO.

No fires shall be lit on site without the express permission of the TO.

All fire points, access routes and roadways must be kept clear of obstruction at all times.

Where it may be necessary to cause temporary obstruction for the purposes of carrying out the work, this shall be discussed and agreed with the TO.


N.B. All contractors working within a wind turbine must hold an in date GWO Fire Awareness certificate

24 CONTRACTORS QUERIES

Contractor queries should be directed to the TO.

GENERAL SAFETY REQUIREMENTS

1. Comply with instructions, site rules and site safety signs
2. Report anything that seems unsafe
3. Wear appropriate Personal Protective Equipment
4. Keep your work area tidy and clean up when finished
5. Use the correct tools and use them safely
6. Report accidents and near misses
7. Think of the safety of others as well as your own
8. Do not take chances. IF IN DOUBT - ASK
9. Do not interfere with plant or apparatus
10. Do not bring any hazardous substance or material on to site without permission
11. Do not remove flooring or gratings without permission
12. Do not ride on vehicles that are not designed to carry passengers
13. Do not park vehicles in unauthorised areas

	ONSHORE (Europe & APAC) HSE Requirements for Contractors Working on RWE Renewables Onshore : Wind, Solar & Battery Sites Terms & Conditions			Issuing Dept. ANB-EH Doc. No.: ANB-EH_HSE001_UK Revision: 0.2 Page: 27/28
	prepared	checked	released	Status : Current Released : August 2019 Review date: August 2021

CONTRACTOR'S COPY

RWE Renewables Onshore Europe & APAC

H&S REQUIREMENTS FOR CONTRACTORS

ON RWE RENEWABLES ONSHORE EUROPE & APAC SITES & PREMISES

RECEIPT

Contract Number and Description:

.....

Location:

.....

The TO for the Contract is:

.....

Telephone No:.....

The TO for the Contract is:

.....

Telephone No:.....

If, for any reason, he is not available, you should contact:

.....

In Emergency (Fire, First Aid), ring:

.....

