Wind Turbine Safety Rules - Support Procedure P2

Company 'A' Wind Turbine Safety Rules Procedure Approval of Tools, Equipment and Processes

4th Edition





G+ Global Offshore Wind Health & Safety Organisation

In partnership with



SUPPORT PROCEDURE P2 Company 'A' Wind Turbine Safety Rules Procedure Approval of Tools, Equipment and Processes

4th edition

June 2021

Version 1

Published by Energy Institute, London

The Energy Institute is a professional membership body incorporated by Royal Charter 2003 Registered charity number 1097899 The Energy Institute (EI) is the chartered professional membership body for the energy industry, supporting over 23 000 individuals working in or studying energy and 200 energy companies worldwide. The EI provides learning and networking opportunities to support professional development, as well as professional recognition and technical and scientific knowledge resources on energy in all its forms and applications.

The El's purpose is to develop and disseminate knowledge, skills and good practice towards a safe, secure and sustainable energy system. In fulfilling this mission, the El addresses the depth and breadth of the energy sector, from fuels and fuels distribution to health and safety, sustainability and the environment. It also informs policy by providing a platform for debate and scientifically-sound information on energy issues.

The EI is licensed by:

- the Engineering Council to award Chartered, Incorporated and Engineering Technician status, and
- the Society for the Environment to award Chartered Environmentalist status.

It also offers its own Chartered Energy Engineer, Chartered Petroleum Engineer, and Chartered Energy Manager titles.

A registered charity, the El serves society with independence, professionalism and a wealth of expertise in all energy matters.

This publication has been produced as a result of work carried out within the Technical Team of the EI, funded by the EI's Technical Partners. The EI's Technical Work Programme provides industry with cost-effective, value-adding knowledge on key current and future issues affecting those operating in the energy sector, both in the UK and internationally.

For further information, please visit http://www.energyinst.org

The El gratefully acknowledges the Operational Safety Rules Group, and financial contributions towards the development of this publication from members of SafetyOn, the Health and Safety Organisation for the Onshore wind sector, and the G+ Global Offshore Health and Safety Organisation:

Banks Renewables	Ørsted
Deutsche Windtechnik	Renewable Energy Systems
EDF Renewables	RWE
Enercon Services	Scottish Power Renewables
Equinor	Siemens Gamesa Renewable Energy
Fred. Olsen Renewables	SSE Renewables
GE Energy	Statkraft
Natural Power	Vattenfall
Nordex Acciona Windpower	Ventient Energy
Ocean Winds	Vestas

However, it should be noted that the above organisations have not all been directly involved in the development of this publication, nor do they necessarily endorse its content.

Copyright © 2021 by the Energy Institute, London. The Energy Institute is a professional membership body incorporated by Royal Charter 2003. Registered charity number 1097899, England All rights reserved

No part of this book may be reproduced by any means, or transmitted or translated into a machine language without the written permission of the publisher.

ISBN 978 1 78725 251 6

Published by the Energy Institute

The information contained in this publication is provided for general information purposes only. Whilst the Energy Institute and the contributors have applied reasonable care in developing this publication, no representations or warranties, express or implied, are made by the Energy Institute or any of the contributors concerning the applicability, suitability, accuracy or completeness of the information contained herein and the Energy Institute and the contributors accept no responsibility whatsoever for the use of this information. Neither the Energy Institute nor any of the contributors shall be liable in any way for any liability, loss, cost or damage incurred as a result of the receipt or use of the information contained herein.

Hard copy and electronic access to El and IP publications is available via our website, **https://publishing.energyinst.org**. Documents can be purchased online as downloadable pdfs or on an annual subscription for single users and companies. For more information, contact the El Publications Team. e: **pubs@energyinst.org**

CONTENTS

Page

Proce and p	dure for approval of tools, equipment processes	5
1	Introduction	5
2	Definitions	6
3	General requirements	7
Appe	ndix A	8
Appe	ndix B Company 'A' wind turbine safety rules (4th edition)	9

Company 'A' Wind Turbine Safety Rules (4th Edition) 2021

Support Procedure P2

Approval of Tools, Equipment and Processes

CHANGE LOG

Rev	Modification	Issue Date	Page
1	New document	2015	-
2	Change Log added	May 2019	2
3	Removal of RUK	Dec 2019	All
4	Renaming to WTSR 4th Edition 2021	June 2021	All
	Reference to UK Legislation removed and general term added to allow global interpretation		

PROCEDURE FOR APPROVAL OF TOOLS, EQUIPMENT AND PROCESSES

1 INTRODUCTION

The purpose of this procedure is to enable Company 'A' to establish a Management Instruction setting out their requirements for the Approval of Tools, Equipment and Processes as required under Company 'A' Wind Turbine Safety Rules; Definition D3(ii).

2 DEFINITIONS

For the purposes of this Procedure:

- **2.1** Management Instruction means a procedure for use at an individual Wind Farm Location or series of Wind Farm Locations, that documents additional elements of the Health and Safety Management systems of Company 'A' that are to be applied to meet specified requirements of the WTSR.
- **2.2** 'Responsible Manager' means the Manager, appointed by Company 'A', who will have responsibility for the Plant and LV Apparatus whenever the Company 'A' Wind Turbine Safety Rules apply to it.

3 GENERAL REQUIREMENTS

- **3.1** Before purchase and Approval of any tools, equipment or process for use in connection with the Wind Turbine Safety Rules, reference should be made to this Support Procedure P2.
- **3.2** Company 'A' should maintain an up-to-date register of tools, equipment and processes currently 'Approved' for use on its Wind Farm Location(s). This record should contain details of the circumstances under which such tools, equipment or processes can be used and any requirements for training. A template register is included in Appendix B.

The register should be reviewed at regular intervals, even when no new entries have been necessary, to ensure that the contents remain up to date. It is recommended that the register is 'signed' and produced in a manner which prevents 'non-approved' amendments being added.

3.3 When purchasing any 'tools or equipment', care must be exercised to ensure that the 'end use' will be fully in accordance with the manufacturer's design intention. Due account should be taken of any relevant Legislation, Standards, and Codes that may be applicable. In general, tools and equipment must carry the 'CE' mark to indicate conformity.

In addition, Company 'A' should take into account guidance issued by other competent authorities in the Country where the work will take place.

- **3.4** In the event that tools or equipment are to be bought and utilised for any application other than their intended design use, or are to be modified in any way prior to use, or are to be designed and manufactured specifically for use by Company 'A' in any given application, then Company 'A' should:
 - Refer to external technical support when the necessary level of expertise is not available 'in-house' and consider the need for independent assessment or certification
 - Draft a full technical specification (including drawings) for each individual item of 'tools or equipment' and retain whilst such items remain available for use
 - Ensure that a risk assessment is carried out where appropriate.
- **3.5** In the case of tools and equipment, all legal requirements must be complied with.
- **3.6** In the case of Personal Protective Equipment, all legal requirements must be complied with.
- **3.7** All 'Approved' tools and equipment should be regularly inspected, tested, maintained and serviced in accordance with the manufacturers' / suppliers' recommendations. Records of maintenance should be kept and training should be provided where appropriate.
- **3.8** Provision should be made for the safe storage and issue of 'Approved' tools and equipment.
- **3.9** Before the approval of a 'process', Company 'A' should ensure that it is subject to a full technical assessment and risk assessment by a competent person.
- **3.10** Company 'A' should ensure that all persons required to use any tools and equipment, or who are required to follow any process, approved under this Wind Turbine Safety Rules Support Procedure P2 are trained and competent.
- **3.11** Company 'A' should confirm that tools and equipment used by contractors conform to its requirements.

APPENDIX A

Examples of Processes, Equipment and Tools that might need to be covered by this WTSR Procedure P2 and which must then be subject to a formal Approval by Company 'A', are:

Personal Protective Equipment (PPE)

- Breathing Apparatus and Respiratory Protective Equipment
- Personal Protection against Flames and Heat
- Rubber Gloves / Insulating Gloves
- Protection against falls from height

Safes

- Card Safe
- Key Safe

Notices

- Caution Notice
- Danger Notice
- Polychlorinated Biphenyl (PCB) Notice
- SF₆ Point of Access Notice

Voltage Testing Devices

- Phasing Out Device
- Voltage Detection Instrument
- Voltage Indicator
- Voltage Measuring Device
- Voltage Testing Device

Cable Detection Instruments

Insulated Hand Tools

Insulating Stands and Mats

NOTE: The above are examples only and Company 'A' should review its own individual requirements for Approval of Tools, Equipment and Processes under its Wind Turbine Safety Rules.

APPENDIX B COMPANY 'A' WIND TURBINE SAFETY RULES (4TH EDITION)

Template Register of 'Approved' Tools, Equipment and Processes

This register contains individual sections for each type of 'Approved' item:

Section	Туре
A	Processes
В	Equipment
С	Tools
D	Other items

APPROVAL

Approved and Issued by Company 'A':

Name:

Signature:....

Date of issue:.....

Document Control/Amendment History:					
VersionReason for change:Date of issuePreparedChecked					

Process	Supporting Procedure/ Document Reference	Location(s)

i) Personal protective equipment

Description	Type of equipment	Manufacturer/ Model reference(s)	Use (if appropriate)	Location(s)
Breathing Apparatus and Respiratory Protective Equipment				
Personal Protection against Flames and Heat				
Rubber Gloves/ Insulating Gloves				
Protection against falls from height				

ii) Safes

Description	Type of equipment	Manufacturer/ Model reference(s)	Use (if appropriate)	Location(s)
Document Safe				
Key Safe				

iii) Notices

Notice	Reference/Description	Location(s)
Caution Notice		
Danger Notice		
Polychlorinated Biphenyl (PCB) Notice		
SF ₆ Point of Access Notice		

iv) Insulated equipment (Note: See 'TOOLS' Section C for insulated tools)

Description	Type of equipment	Manufacturer/ Model reference(s)	Use (if appropriate)	Location(s)
Insulated mats				
Insulating stands				

v) Other equipment

(including equipment bought and utilised for any application other than their intended design use or modified in any way prior to use or designed and manufactured for Company 'A' to be used in a specific application)

Description	Design/ documentation reference(s)	Risk assessment reference(s)	Use (if appropriate)	Location(s)

i) Voltage testing devices

Description	Type of equipment	Manufacturer/ Model reference(s)	Use (if appropriate)	Location(s)
Phasing out device				
Voltage detection equipment				
Voltage indicator				
Voltage measuring device				
Voltage testing device				

ii) Cable detection instruments

Description	Type of equipment	Manufacturer/ Model reference(s)	Use (if appropriate)	Location(s)
Cable Avoidance Tool				

iii) Insulated hand tools

Description	Type of equipment	Manufacturer/ Model reference(s)	Use (if appropriate)	Location(s)

iv) Other tools

(including tools bought and utilised for any application other than their intended design use or modified in any way prior to use or designed and manufactured for Company 'A' to be used in a specific application)

Description	Design/ documentation reference(s)	Risk assessment reference(s)	Use (if appropriate)	Location(s)

OTHER APPROVED ITEMS

Description	Type of equipment	Manufacturer/ Model reference(s)	Use (if appropriate)	Location(s)



Energy Institute 61 New Cavendish Street London W1G 7AR, UK

t: +44 (0) 20 7467 7100 e: pubs@energyinst.org www.energyinst.org This publication has been produced as a result of work carried out within the Technical Team of the Energy Institute (EI), funded by the El's Technical Partners and other stakeholders. The El's Technical Work Programme provides industry with cost effective, value adding knowledge on key current and future issues affecting those operating in the energy industry.



ISBN 978 1 78725 252 3 Registered Charity Number: 1097899