Wind Turbine Safety Rules - Support Procedure P8

Company 'A' Wind Turbine Safety Rules Procedure Approval of Electronic Safety Document Systems

4th Edition





G+ Global Offshore Wind Health & Safety Organisation

In partnership with



SUPPORT PROCEDURE P8 Wind Turbine Safety Rules Approval Of Electronic Safety Document Systems

4th edition

June 2021

Version 1

Published by Energy Institute, London

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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	

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ISBN 978 1 78725 258 5

Published by the Energy Institute

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CONTENTS

		Page
Forev	word	4
1	Scope	6
2	Definitions	7
3	General requirements	8
4	Specific requirements for approved written procedures	10
5	Specific requirements for routine operating procedures	11
6	General requirements for electronic documents	12

FOREWORD

The purpose of this procedure is to enable Company 'A' to establish a Management Instruction, setting out their requirements for the approval of Electronic Safety Document Systems as required to comply with the Company 'A' Wind Turbine Safety Rules (WTSR).

Wind Turbine Safety Rules (4th Edition) 2021

Support Procedure P8

Requirements of Electronic Safety Document Systems

CHANGE LOG

Rev	Modification	Issue Date	Page
1	New document	2018	-
2	Change Log added	May 2019	2
3	Removal of RUK	Dec 2019	All
	Renaming to WTSR 4 th Edition 2021	June 2021	All
	Updated reference to all applicable Legislation and standards.		
	Title changed to reflect the 'Requirements of Electronic Safety Document Systems'		
4	4.8 Amended (Authorised Technicians replaced with Authorising Engineer)		
	6.2 Amended to 'Normally, a site visit should be undertaken to prove the adequacy of the Approved Written Procedure in achieving Safety from The System.		

1 SCOPE

This Support Procedure is applicable to Safety Documents as defined within the Wind Turbine Safety Rules. It shall allow Electronic Safety Documents to be developed so that Safety Documents can be completed as required by Persons Appointed by Company 'A' to satisfy the requirements of the Wind Turbine Safety Rules.

In developing and implementing an Electronic Safety Document System, persons Appointed by Company 'A' shall be familiar with any requirements set out under applicable legislation and health and safety guidance.

This procedure has been written taking account the relevant requirements as they relate to the Wind Turbine Safety Rules (WTSR).

For the purpose of this procedure, electronic signatures shall fulfil the following conditions:

- An electronic signature shall be uniquely linked to the signatory.
- An electronic signature shall be capable of identifying the signatory.
- An electronic signature shall be created using means that the signatory can maintain under his control.
- An electronic signature shall be linked to the data which it relates in such a manner that any subsequent change of the data is detectable.

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 shall have responsibility for the Plant/LV Apparatus whenever the Company 'A' Wind Turbine Safety Rules apply to it.
- **2.3** 'Safety Documents' means either an Approved Written Procedure and/or a Routine Operating Procedure.
- **2.3.1** Approved Written Procedure an Approved procedure written in a format indicated in these Rules specifying the Plant/LV Apparatus on which work or testing can take place, without Danger, by an Authorised Technician following the precautions stated to achieve Safety from The System.
- **2.3.2** Routine Operating Procedure a written procedure, for use with the full knowledge and agreement of Company 'A', that defines operational work or testing, which is of a regular or routine nature that may be carried out on Plant and/or LV Apparatus by a suitably trained Competent Technician without an Approved Written Procedure. It shall define the safety requirements whose application shall be within the capability of the Competent Technician who is to carry out the routine work or testing.

3 GENERAL REQUIREMENTS

- **3.1** A risk assessment shall be completed to assess the risks involved if changing from a paperbased Safety Document System to an Electronic Safety Document System. Any risks that are identified shall be mitigated before implementing any Electronic Safety Document System.
- **3.2** In the event that Company 'A' decides to implement an Electronic Safety Document System, it shall be necessary for Company 'A' to write and issue a Management Instruction to detail how the use of an Electronic Safety Document System shall be implemented and maintained. Key roles and responsibilities shall be allocated to suitably competent persons in order that the Electronic Safety Document System adheres to the requirements of this Support Procedure.
- **3.3** The requirements of Support Procedure P2 and the relevant Company 'A' Management Instruction for the approval of tools, equipment and processes shall be met prior to implementing an Electronic Safety Document System.
- **3.4** Company 'A' shall ensure that the Safety Document System is fully supported and updated to prevent it from becoming outdated and or/incompatible with operating systems on electronic devices.
- **3.5** The Electronic Safety Document System shall have a unique identity for each of the Appointed Persons who are intending to use the system.
- **3.6** Appointed Persons shall not provide other persons (Appointed or not) with their login/identity details.
- **3.7** The Electronic Safety Document System shall not allow any technical or safety content of the Safety Document to be changed once it has been Approved by the Authorising Engineer.
- **3.8** The electronic device shall have suitable and sufficient security so that the input of the required data on to the Electronic Safety Document can only be controlled by the Competent Technician or Authorised Technician in charge of the Working Party.
- **3.9** Electronic Safety Documents shall only be updated/uploaded/managed and Approved in accordance with the correct procedure for document issue/update as detailed in the Company 'A' Management Instruction.
- **3.10** There shall be a process available to follow by Appointed Persons that in the event that the electronic system fails or is unavailable, Safety from The System can be maintained and that an Approved audit trail can be maintained. Where a task is part completed and the electronic system fails, an Approved procedure shall be subject to the requirements of Support Procedure P1 'Procedure for Approval of General Provisions Special Instructions (GP3) and other Procedures. This facility is not intended to cater for regular scenarios where electronic connectivity is lost, but rather for isolated but significant failure of the device or system and so be treated in the same manner as the loss of a physical (e.g., paper based) Safety Document.
- **3.11** It is up to Company 'A' to ensure that any wireless networks crucial to the successful operation of the Electronic Safety Document System are proven to be robust enough to allow reliable use of the system. Where an electronic system is proving to be unreliable, the use of paper-based system shall be re-introduced until such time that the electronic system is proven to be operating correctly again.

- **3.12** Electronic Safety Documents shall be safely archived for a period of time as defined in Company 'A' Management Instruction.
- **3.13** Electronic Safety Documents shall be archived in such a way that they can be readily audited by the relevant Managers, safety professionals and independent parties.
- **3.14** The device that is used to interact with an Electronic Safety Document shall be physically robust enough and managed in such a way that it can cope with the rigors of the working environment so that any potential failure of the device as a result of the working environment and other factors is as low as reasonably practicable. Company 'A' shall determine through a process of risk assessment if a chosen device meets the demands of the working environment.
- **3.15** The device that is used when using an Electronic Safety Document shall be configured in such a way that the time and date cannot be changed by the Appointed Persons.
- **3.16** Hyperlinks can be contained within Electronic Safety Document to enable easy cross-reference against method statements, risk assessments and other associated supporting safety documentation.
- **3.17** Electronic Safety Documents shall meet the same minimum standards of content as described within the Wind Turbine Safety Rules as that of paper-based Safety Documents.

4 SPECIFIC REQUIREMENTS FOR APPROVED WRITTEN PROCEDURES

- **4.1** An electronic Approved Written Procedure shall be capable of accepting a counter signature by another Authorised Technician after a period of Surrender against Signature Checkpoints and points of isolations.
- **4.2** The Authorised Technician shall have the facility to allow a secondary signature on the Electronic Approved Written Procedure. This shall allow an additional Authorised Technician to counter signature against Signature Checkpoints for points of isolation during the work flow if an Authorised Technician instructs another Authorised Technician to apply a safety precaution.
- **4.3** The Authorised Technician shall have the facility to allow a secondary signature on the electronic Approved Written Procedure of a person appointed under the relevant High Voltage Safety Rules when cross-boundary safety precautions are required.
- **4.4** Only one Authorised Technician shall be able to access and use an active Approved Written Procedure at any one time.
- **4.5** The electronic Approved Written Procedure shall be capable of being put into a 'virtual' safe custody for the purposes of Surrender so that only an Authorised Technician with the relevant appointment can gain access to the Safety Document when work is to be resumed.
- **4.6** Company 'A' shall ensure that a process for the safe custody of Safety Keys and other issued items is available for use whilst the Electronic Safety Document is held in Surrender.
- **4.7** An electronic Approved Written Procedure shall allow for the Authorised Technician to add free text beside relevant Signature Checkpoints in the event that work has to temporarily stop.
- **4.8** It can be possible for the Authorised Engineer to add key additional document numbers to the Electronic Safety Document such as Selected Persons reports, Maintenance Work Orders etc.
- **4.9** It can be possible for Authorised Technicians to add work order numbers as required by the Approved Working Procedure.

5 SPECIFIC REQUIREMENTS FOR ROUTINE OPERATING PROCEDURES

- **5.1** An Electronic Safety Document system shall allow for the recording of the agreement of Company 'A' and the Authorising Engineer that a Routine Operating Procedure is valid in accordance with the Company 'A' Management Instruction.
- **5.2** An electronic Routine Operating Procedure shall be capable of accepting relevant inputted information by the Competent Technician in charge of the Working Party.

6 GENERAL REQUIREMENTS FOR ELECTRONIC DOCUMENTS

Before introducing an Electronic Safety Document System operators shall be sure that:

6.1 A suitable system (e.g., password-protected electronic signatures) is in place to prevent unauthorised issue or acceptance.

Guide: To be included within Company 'A' Management Instruction.

6.2 Normally, a site visit should be undertaken to prove the adequacy of the Approved Written Procedure in achieving Safety from The System.

Guide: An AE will normally undertake a site visit to prove the adequacy of the Approved Written Procedure in achieving Safety from The System. The verification of the Approved Written Procedure will normally include input from an Authorised Technician. The exact process for approving Approved Written Procedures shall be included within a Company 'A' Management Instruction. Once this has been completed the Authorising Engineer would formally approve the Approved Written Procedure which can then be used by the Authorised Technician without the need for the Authorising Engineer to be in attendance.

[Note: This requirement is not mandatory as referenced by the use of the term 'normally'. However, each company shall have a Management Instruction on how AWP's are Approved in line with WTSR C3 (Authorising Engineer) and Support Procedure P1 (Procedure for Approval of General Provisions Special Instructions (GP3 and other Procedures)

6.3 Systems are in place to prevent documents (e.g., AWP's, ROP's) already issued from being altered without the alterations being communicated to all concerned.

Guide: To be included within Company 'A' Management Instruction.

6.4 The facility exists for paper documents (e.g., AWP's, ROP's) to be produced for display at the job site.

Guide: To be included within Company 'A' Management Instruction.

6.5 Training is provided to ensure that operators assess the specific job and do not rely on 'cutting and pasting' existing sections from other documents (e.g., AWP's, ROP's).

Guide: To be included within Company 'A' Management Instruction.

6.6 Suitable back-up systems are available in the event of a software failure or power outage.

Guide: To be included within Company 'A' Management Instruction.



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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 258 5 Registered Charity Number: 1097899