

TECHNICAL AUDIT REPORT

GREENSOLVERThere is no text to translate.28 Boulevard HaussmannThere is no text to translate.75009 PARIS

Location of intervention : Wind farm "Source of Sèves», 50490 – Vaudrimesnil.	Mission completed on 11/12/2024 There is no text to translate. Names of Auditors: AUVRAY Pierre-SOCOTEC
Name of the Accompanying Person: Enzo GERLELIX	
Case Number: 2412H0270000001There is no text to translate. Intervention Number: H0270241200000000329There is no text to translate. Nature of the mission: Technical audit of a wind farm.	

1.Characteristics about the wind farm:

Name of the park :	Source of Sèves
Operating Company :	EDPR
Geographic coordinates:	<input type="checkbox"/> Latitude : 49° 9' 26.3" <input type="checkbox"/> Longitude : -1° 26' 43.6"
Location :	Vaudrimesnil 50490 – Saint-Sauveur-Villages
Composition of the park:	5 Wind Turbines & 1 Power Distribution Line

Location geographical location of the wind farm:

2.Documents provided:

Documents	References	Dates	Comments
Prevention Plan	PDP V12	10/12/2024	Studied
Previous reports ofThere is no text to translate.periodic general inspection (Lift, Hoist, Fire Extinguisher, RESQ, LDV, Low	Socotec	04/2024	Studied

2. ENR North Agency ENR NORD Pole - SOCOTEC POWER SERVICES - 10 Avenue de Thionville - 57140 WOIPPY Email: enr@socotec.com There is no text to translate. SOCOTEC POWER SERVICES - Limited company with a capital of 43,904 euros - 067 704 650 RCS Versailles Registered office: Mirabeau Building - 5 place des There is no text to translate. Montgolfier Brothers Guyancourt - CS 20732 - 78182 Saint Quentin-en-Yvelines Cedex - FRANCE - www.socotec.fr

3.Characteristics some audited turbines:

Identification :	VDN 2
Constructor :	Siemens Gamesa
Model:	SG97 T120
Power (W) :	2 MW
Tower height (m) :	120 m
Rotor (m) :	97 m
Maintainer :	SGRE

Photo representing with an SG97 T120 wind turbine

4.Characteristics of the audited delivery post:

Number of PDL associated with the wind farm:	1
Manufacturer and model of the PDL:	ORMAZABAL
Maintainer :	/

5. Results of the inspection:

Level of severity of states: Normal state – No action to be taken.

Degraded state – Action to be taken, low


importance Critical Condition – Action to be taken, high

importance There is no text to translate. Critical State

– Action to be taken, immediate importance

Audited Turbine VDN 2

Tower foot:

	Description	State	Observations	Images
Access	Presence of the ICPE sign at the entrance to the access.	Normal state	No defect was found during the audit.	
	State of the access path.	Normal state	No defect was found during the audit.	
	State of conservation of the access staircase, conservation, bolting.	Normal state	No defect was found during the audit.	

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Access	Visual inspection of foundations, search for cracks and deterioration, bolting.	Degraded state	Foam has appeared which makes the foundation slippery. <i>EDPR Comment: The control will be carried out during the next maintenance by SGRE</i>	
	Visual inspection of the condition of the surroundings, vegetation, ruts, mud,	Normal state	No defect was found during the audit.	
	Condition of the access door, filter, grid, locking.	Degraded state	The display on the door isThere is no text to translate.damaged by weather conditions. <i>EDPR Comment: A check will be carried out during the nextThere is no text to translate Site</i>	
General platform status	Condition of the platform, deformation, bolting, cleanliness, hatch,...	Normal state	No defect was found during the audit.	
General interior condition	State of wall preservation, presence of oil, cleanliness.	Normal state	No defect was found during the audit.	

General interior condition	Elevator	Normal state	No defect was found during the audit.	
	State of conservation of HT cells	Normal state	No defect was found during the audit.	
	Condition of electrical cabinets	Normal state	No defect was found during the audit.	
	State and presence of mandatory displays.	Normal state	No defect was found during the audit.	

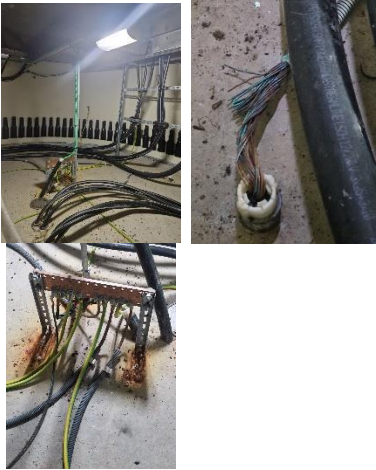
Level of severity of states: Normal state – No action to be taken.

Degraded state – Action to be taken, low importance

Critical Condition – Action to be taken, high importance

Critical State – Action to be taken, immediate importance

Tour :

	Description	State	Observations	Images
Foundation	State of cleanliness	Critical condition	Rusty and damaged earth cable <i>EDPR Comment: OneThere is no text to translate.A specific inspection will be carried out during the year (QAQC Foundation)</i>	
	Lighting	Normal state	No defect was found during the audit.	
	Access	Normal state	No defect was found during the audit.	
	Serrage	Normal state	No defect was found during the audit.	
Section 1	State of cleanliness	Normal state	No defect was found during the audit.	
	Lighting	Normal state	No defect was found during the audit.	
	Access - gate	Normal state	No defect was found during the audit.	

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Section 1	Serrage	Normal state	No defect was found during the audit.	
Section 2	State of cleanliness	Normal state	No defect was found during the audit.	
	Lighting	Normal state	No defect was found during the audit.	
	Access - gate	Normal state	No defect was found during the audit.	
	Serrage	Normal state	No defect was found during the audit.	
Section 3	State of cleanliness	Normal state	No defect was found during the audit.	
	Lighting	Normal state	No defect was found during the audit.	
	Access - gate	Normal state	No defect was found during the audit.	
	Serrage	Normal state	No defect was found during the audit.	

Section 4	State of cleanliness	Degraded state	Oil deposit around the tower at the level of the bolts.	
	Lighting	Normal state	No defect was found during the audit.	
	Access - gate	Normal state	No defect was found during the audit.	
	Serrage	Normal state	No defect was found during the audit.	
Yaw section	State of cleanliness	Normal state	No defect was found during the audit.	
	Lighting	Normal state	No defect was found during the audit.	
	Access - gate	Normal state	No defect was found during the audit.	
	Serrage	Normal state	No defect was found during the audit.	


Level of severity of states:Normal state – No action to be taken.

Degraded state – Action to be taken, low importance

Critical Condition – Action to be taken, high importance

Critical State – Action to be taken, immediate importance

Nacelle :

	Description	State	Observations	Images	
Nacelle	State of Cleanliness/ General	Degraded state	Slight oil spill under the slow tree. <i>EDPR Comment: The necessary cleaning will be carried out by SGRE during the next maintenance.</i>		
	Lighting	Normal state	No defect was found during the audit.		
	Access	Normal state	No defect was found during the audit.		
	Display	Normal state	No defect was found during the audit.		

Nacelle	Evacuator - ResQ	Degraded state	The box is slightly damaged, dirtyComment EDPR: EDPR is going toThere is no text to translate.look to change the box		
	Palan	Normal state	No defect was found during the audit.		
	Electric cabinets	Normal state	No defect was found during the audit.		

Level of severity of states:Normal state – No action to be taken.

Degraded state – Action to be taken, low importance

Critical Condition – Action to be taken, high importance

Critical State – Action to be taken, immediate importance

Gear Box :

	Description	State	Observations	Images
General Condition	Verification of cleanliness, presence of hoods and screens, electrical hazards and mechanical hazards.	Degraded state	<p>The entire gearbox is very correct. However, the arrangement and dispersion of the electrical cables are to be reconsidered. In thisThere is no text to translate.From the outset, there is a risk of wear on the electrical cables. The installation of ducts would make it possible to avoid this risk and improve space optimization.</p> <p><i>EDPR Comment: The repair will be carried out if certain components are damaged, butThere is no text to</i></p>	
	Verification of the condition of the silent blocks of the gearbox feet.	Normal state	No defect was found during the audit.	

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General Condition	Verification of the cooling radiator's cleanliness, presence of oil leaks, condition of the hoses.	Degraded state	Presence of oil leak. <i>EDPR Comment: The necessary cleaning will be carried out by SGRE during the next maintenance.</i>	
Level	Visual check of the oil level.	Normal state	No defect was found during the audit.	
Dust collector / filter	Checking the condition of the filters (without disassembly).	Normal state	The oil filter housing does not leak.	
Silent block	Verification of the condition of the silent block (presence of dust).	Normal state	No defect was found during the audit.	
Serrage	Visual inspection of marking traces for screw tightening.	Normal state	No defect was found during the audit.	

Level of severity of states:Normal state – No action to be taken.

Degraded state – Action to be taken, low importance

Critical Condition – Action to be taken, high importance


Critical State – Action to be taken, immediate importance

Generator:

	Description	State	Observations	Images
General Condition	Verification of cleanliness, presence of hoods and screens, electrical hazards and mechanical hazards.	Normal state	No defect was found during the audit.	

Roof :

	Description	State	Observations	Images
General Condition	Access	Degraded state	<p>A screw is damaged and the roofThere is no text to translate.slightly recessed at the access hatch level</p> <p><i>EDPR Comment: The necessary repair will be carried out by SGRE during the next maintenance</i></p>	

General Condition	Anchor points	Normal state	No defect was found during the audit.	
	Weather mast	Degraded state	<p>Rust trace on the part connecting the 2 weather masts.</p> <p><i>EDPR Comment: EDPR will check how to manage this issue.</i></p>	

Level of severity of states:Normal state – No action to be taken.

Degraded state – Action to be taken, low importance



Critical Condition – Action to be taken, high importance

Rotor :

Critical State – Action to be taken, immediate importance

	Description	State	Observations	Images	
Shales	Panel 1 – rooftop view	Degraded state	Open joint, the pale seems worn in places <i>EDPR Comment: The ICPE inspection has already been carried out withoutThere is no text to translate.Issue identified.</i>		
	Page 2 – rooftop view	Degraded state	Open marriage <i>EDPR Comment: The ICPE inspection has already been carried out withoutThere is no text to translate.Issue identified.</i>		
	Panel 3 – rooftop view	Normal state	No defect was found during the audit.		
Interior	State	Degraded state	Dust traces <i>EDPR Comment: The necessary cleaning will be carried out by SGRE during the next maintenance.</i>		

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HUB	Access	Degraded state	A bit of grease present at the entrance <i>EDPR Comment: The necessary cleaning will be carried out by SGRE during the next maintenance.</i>	
	Interior	Degraded state	Presence of dust and oil There is no text to translate.that can accelerate the degradation of flexibles <i>EDPR Comment: The necessary cleaning will be carried out by SGRE during the next maintenance.</i>	

Audited delivery post Vaudrimesnil:

Level of severity of states:
Normal state – No action to be taken.
Degraded state – Action to be taken, low importance
Critical Condition – Action to be taken, high importance
Critical State – Action to be taken, immediate importance

	Description	State	Observations	Images
Access	Approaches	Normal state	No defect was found during the audit.	
	State of PDL structures	Normal state	No defect was found during the audit.	
Access	Display	Degraded state	The display is damaged by the weather conditions.	

	Access doors	Normal state	No defect was found during the audit.	
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Interior	State of wall preservation, cleanliness.	Normal state	No defect was found during the audit.	
	State of conservation of HT cells (obstacles, interlocking, ...).	Normal state	No defect was found during the audit.	

Interior	Condition of electrical cabinets (exterior/interior).	Normal state	No defect was found during the audit.	
	State and presence of mandatory displays.	Normal state	No defect was found during the audit.	
	State and presence of electrical PPE.	Normal state	No defect was found during the audit.	

Interior	State and presence of safety lighting.	Normal state	No defect was found during the audit.		
	State of equipment (PC, lighting, heating, equipment).	Normal state	No defect was found during the audit.		
	Condition of the auxiliary transformer (if present).	Normal state	No defects were found during the audit.		
	State and presence of spare fuses.	Normal state	Presence of spare fuses in the PDL.		

6.Conclusion following the results:

Tower foot:There is no text to translate.Sampling allowed to determine a correct set of the "Tower Base" part of the wind farm turbines.

Actions to be taken after sampling:There is no text to translate.-There is no text to translate.Clean the foundationThere is no text to translate.-There is no text to translate.Carry out a review of the stickers presenting the important information.

-There is no text to translate.Replace the ground cables in the foundationThere is no text to translate.**Tour** :There is no text to translate.-There is no text to translate.Clean the last section

Gear box :There is no text to translate.Sampling allowed to determine a fairly correct set of the "Gear box" part of the wind farm turbines.

Actions to be taken after sampling:There is no text to translate.-There is no text to translate.Find a better layout for the arrangement of the electrical cables of the gear box, itThere is no text to translate.It is recommended to install gutters to optimize space.

There is no text to translate.Fix the leak. -There is no text to translate.**Roof** :There is no text to translate.-There is no text to translate.Clean and repaint the mast at the level of the corroded part

Delivery Post :There is no text to translate.Sampling allowed to determine a very correct set of the "PDL" part of the wind farm.

Actions to be taken after sampling:There is no text to translate.-There is no text to translate.Create a new display outside the PDL.

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