

Maintenance checks report

Checklist name	Year
MV Maintenance Year 7	7

Site	Turbine serial number	Order number
Language	Revision date checklist	Approval date
en-US	11/12/2024	

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1. Tools

Tools				
Group	#	Name	Calibration ID	Remarks
1	1	Battery tester (Dummy-Adw020)		

2. Check details

2.1. Checks from the maintenance plan

ECN				
AD 5-135_1_1_5_MV_year_7.0				
#	Measuring points	Remarks	Tools	Status
Location: Nacelle inside				
1	ATD000276.0: Generator - Overload clutch and bolts - Inspection			
2	ATD000276.1: Generator - Overload clutch body spring - Inspection			
3	ATD000276.2: Generator - Overload clutch mark aligned with rotor mark - Inspection			
4	ATD000373.0: Slip ring unit - Power bushes and rings - Inspection			
5	ATD000373.1: Slip ring unit - Signal bushes and rings - Inspection			
6	ATD000377.0: Generator - Upper grounding brush - Inspection			
7	ATD000377.1: Generator - Upper grounding brush support component - Inspection			
8	ATD000377.2: Generator - Middle grounding brush - Inspection			
9	ATD000377.3: Generator - Middle grounding brush support component - Inspection			
10	ATD000377.4: Generator - Bottom grounding brush - Inspection			
11	ATD000377.5: Generator - Bottom grounding brush support component - Inspection			
12	ATD000605.0: Generator - Enclosure of the machine and all holding fixtures - Inspection			
13	ATD000605.1: Generator - Stator covers seal & winding connections tightness and external damages - Inspection			
14	ATD000605.2: Generator - Terminal box and all the connections - Inspection			
15	ATD000605.3: Generator - Rotor - Inspection			
Location: Tower				
16	ATD000311.6: Wind turbine system - Emergency stop button at lift frame - Test			
17	ATD000383.0: Converter - Main components on the CCU - Inspection			
18	ATD000383.10: Converter - Ground connection - inspection			

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#	Measuring points	Remarks	Tools	Status
Location: Tower				
19	ATD000383.11: Converter - Lateral fan with heater in CCU - inspection			
20	ATD000383.12: Converter - Roof fan in FIU - Inspection			
21	ATD000383.13: Converter - Roof and door fan in POU - inspection			
22	ATD000383.14: Converter - Roof and door fan in DLU - inspection			
23	ATD000383.15: Converter - Pump - Auditory inspection			
24	ATD000383.16: Converter - Pump has no leakages - Inspection			
25	ATD000383.17: Converter - Vessel hoses - Inspection			
26	ATD000383.1: Converter - Cable connections on the CCU - inspection			
27	ATD000383.2: Converter - Main components on the FIU - Inspection			
28	ATD000383.3: Converter - Cable connections on the FIU - inspection			
29	ATD000383.4: Converter - Main components on the POU - Inspection			
30	ATD000383.5: Converter - Cable connections on the POU - inspection			
31	ATD000383.6: Converter - Main components on the DLU - Inspection			
32	ATD000383.7: Converter - Cable connections on the DLU - inspection			
33	ATD000383.8: Converter - Main components on the WCU - Inspection			
34	ATD000383.9: Converter - Cable connections on the WCU - inspection			
35	ATD000478.2: Main transformer - Oil - Sample Barcode number on bottle			
36	ATD000511.0: Converter cooling system - Pipe water circuit - Inspection			
37	ATD000538.0: Emergency lights UPS - Door fan - Auditory inspection			
38	ATD000538.1: Emergency lights UPS - Manual battery test - Test			
39	ATD000538.2: Emergency lights UPS - Fuses F4, F5, F6, F7, F8 and F9 - Inspection			

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#	Measuring points	Remarks	Tools	Status
Location: Tower				
40	ATD000538.3: Emergency lights UPS - All internal components and wiring - Inspection			
41	ATD000538.4: Emergency lights UPS - Battery box - Inspection			
42	ATD000538.5: Emergency lights UPS - Thermostats properly adjusted - Inspection			
43	ATD000538.6: Emergency lights UPS - Measurement points - Measure G1 Resistance <input type="text" value=""/> mOhm G1 Voltage <input type="text" value=""/> V G2 Resistance <input type="text" value=""/> mOhm G2 Voltage <input type="text" value=""/> V G3 Resistance <input type="text" value=""/> mOhm G3 Voltage <input type="text" value=""/> V G4 Resistance <input type="text" value=""/> mOhm G4 Voltage <input type="text" value=""/> V G5 Resistance <input type="text" value=""/> mOhm G5 Voltage <input type="text" value=""/> V G6 Resistance <input type="text" value=""/> mOhm G6 Voltage <input type="text" value=""/> V			
44	ATD000538.7: Emergency lights UPS - Tightness of all nips of each terminal and the fixed terminal adapter on the back - Inspection			
45	ATD000538.8: Emergency lights UPS - Filter and exhaust filter mats - Replace, if necessary			
46	ATD000586.0: Main UPS - Remote battery test - Test Capacity <input type="text" value=""/> kWh			
47	ATD000586.10: Main UPS - Batteries cabinet - Inspection			

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#	Measuring points	Remarks	Tools	Status
Location: Tower				
48	ATD000586.11: Main UPS - Measurement points - Measure G1-G32 Voltage <input type="text" value=""/> V G1-G32 Stock number <input type="text" value=""/> G1-G32 Type number <input type="text" value=""/> G33-G64 Voltage <input type="text" value=""/> V G33-G64 Stock number <input type="text" value=""/> G33-G64 Type number <input type="text" value=""/>			
49	ATD000586.1: Main UPS - Cabinet - Inspection			
50	ATD000586.2: Main UPS - Filter mats - Replace			
51	ATD000586.3: Main UPS - Manual by-pass (UPS disconnection) activation/ restarting performed? - Inspection			
52	ATD000586.4: Main UPS - LEDs states of rectifier and inverter - Inspection			
53	ATD000586.5: Main UPS - Output voltages of the rectifier - Measure Voltage in RCB <input type="text" value=""/> V			
54	ATD000586.6: Main UPS - Output voltages of the static by-pass - Measure Voltage in Q1 <input type="text" value=""/> V			
55	ATD000586.7: Main UPS - Output voltages of the inverter - Measure Voltage in OCB <input type="text" value=""/> V			
56	ATD000586.8: Main UPS - UPS battery cabinet temperature (VISU) - Measure Temperature (VISU) <input type="text" value=""/> °C			
57	ATD000586.9: Main UPS - Output voltages from battery cabinet - Measure Voltage in BCB: 435.8V (25°C) <input type="text" value=""/> V			
58	ATD000644.1: Auxiliary transformer - Earthing connections - Inspection			
59	ATD000644.2: Auxiliary transformer - Oil leakage - Inspection			

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#	Measuring points	Remarks	Tools	Status
Location: Tower				
60	ATD000644.4: Auxiliary transformer - Terminal connections - Inspection			
61	ATD000647.0: Main transformer - Oil leakage - Inspection			
62	ATD000647.1: Main transformer - Paint - Inspection			
63	ATD000647.2: Main transformer - Earthing connection - Inspection			
64	ATD000647.4: Main transformer - Cooling system - Inspection			
65	ATD000647.5 : Main transformer - Resistance thermometer - Test Temperature difference <div>°C</div>			
66	ATD000690.1: Converter - Filter mats - Replace			
67	ATD000728.17: Converter - UPS batteries (2x G403 in POU) - Replace			
68	ATD000728.7: Converter - UPS battery (G303 in CCU) - Replace			

2.2. Additional checks not present in the maintenance plan

Additional tasks				
#	Measuring points	Remarks	Tools	Status
1	ATD000491.1 - Oil sample of the auxiliary transformer			