



OPERATIONAL TECHNOLOGY CYBERSECURITY EXPERT PANEL FORUM 2023

22 – 23 AUGUST 2023

**OT Cybersecurity - From Speculation To
Science**



OT Cybersecurity From Speculation To Science

Horror Vacui:

The fear of leaving blank spaces on a map





A
NEW MAP
OF
AFRICA
FROM THE LATEST AUTHORITIES.
By JOHN CARY, Enguaver.
1805.



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Electrocardiogram (ECG or EKG)



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Security Control Test Cases

Controls	Encryption	Access Control	SIEM	HIDS	NIDS	SOAR
1 (baseline)						
2	X	X				
3			X		X	
4	X		X	X		
5			X	X	X	X

Reference: Hardening Wind Energy Systems From Cyber Threats – Final Report

Sandia Report: SAND2023-12610

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Test Results From Two Attack Scenarios

	Baseline	Encryption + Access Control	SIEM + NIDS	Encryption + SIEM + HIDS	SIEM + HIDS+ NIDS + SOAR
Physical Resilience	46.4%	96.0%	46.4%	96.0%	96.0%
Cyber Resilience	38.5%	46.2%	38.5%	46.2%	76.9%

Reference: Hardening Wind Energy Systems From Cyber Threats – Final Report

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3 Year Cost US\$	0	0.45M	12M	11.47M	21.9M



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The greatest obstacle to discovery is not
ignorance - - it is the illusion of knowledge.

Historian Daniel Boorstin



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