



DIRECT DEFENSE

Cybersecurity for Engineering Disciplines

We Protect What You
Can't Live Without

BE INFORMED.
BE STRATEGIC.
BE SECURE.

March 19, 2024

1

25 Years in IT and Cybersecurity

- Constellation Energy (BG&E Parent Company)
- SunGard
- Black & Veatch
- DirectDefense

Critical infrastructure and manufacturing

Critical infrastructure hacker

Engineering firm cyber partner

Battery storage & smart cities

New rail systems

Physical security

NERC CIP Committee Vice-Chair

AWWA J100 SME

ECL participant since inception

ACEC SME (webinars, podcasts)

ISC2 Instructor and Podcasts

SIA Utility Advisory Board Member

RSA Speaker

Black Hat Speaker



Why do engineers care about cybersecurity?



- The Necessity of Protecting What's Connected
 - Critical Functions – Criticality Matrix
 - Compliance Requirements
 - Structure of Continuity of Operations
 - On Premise isn't really a thing anymore
 - Unexpected ties to critical infrastructure (BESS, Smart Cities)



Reference Project - Hudson Yards



Reference Project - Hudson Yards

- 16 structures on top of a 35,000 ton platform
- 13.3 MW cogeneration power plant with heat and steam recovery
- 4 Million square feet of retail space
- 4,000 residences
- Sidewalk Labs
- Bluetooth
- Full-service mobile app
- Facial Recognition



Changing Threat Landscape

Security Attacks Become More Sophisticated Each Year

Most IT architectures weren't designed to withstand today's sophisticated security threats.



What is important for engineers

- Know what you don't know
- Understanding smart infrastructure
- Push for action on discussions
- Consider RFP requirements



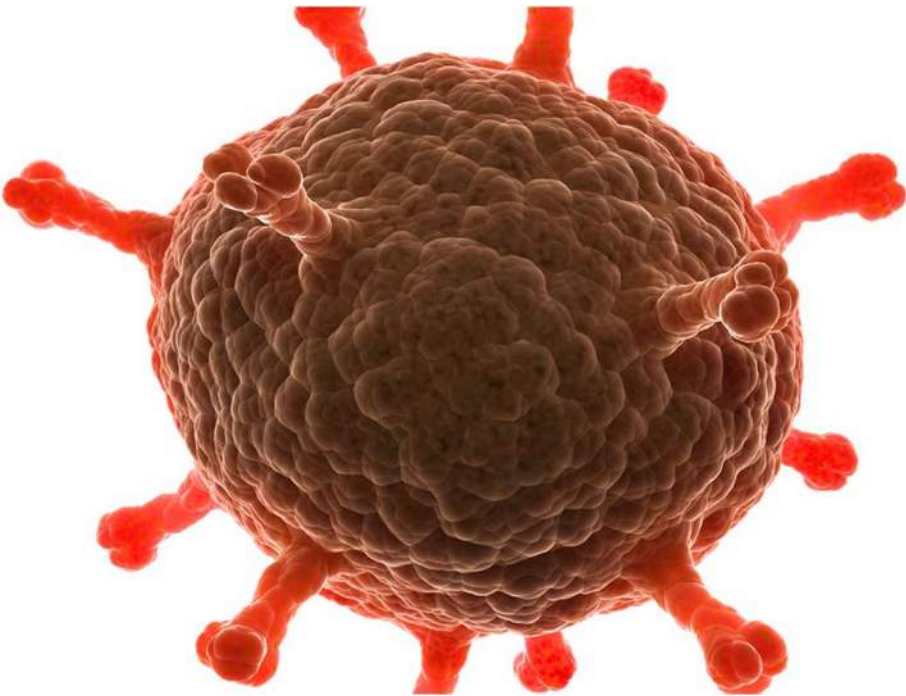
[This Photo](#)

[CC BY](#)



VTDs

Avoiding VTDs



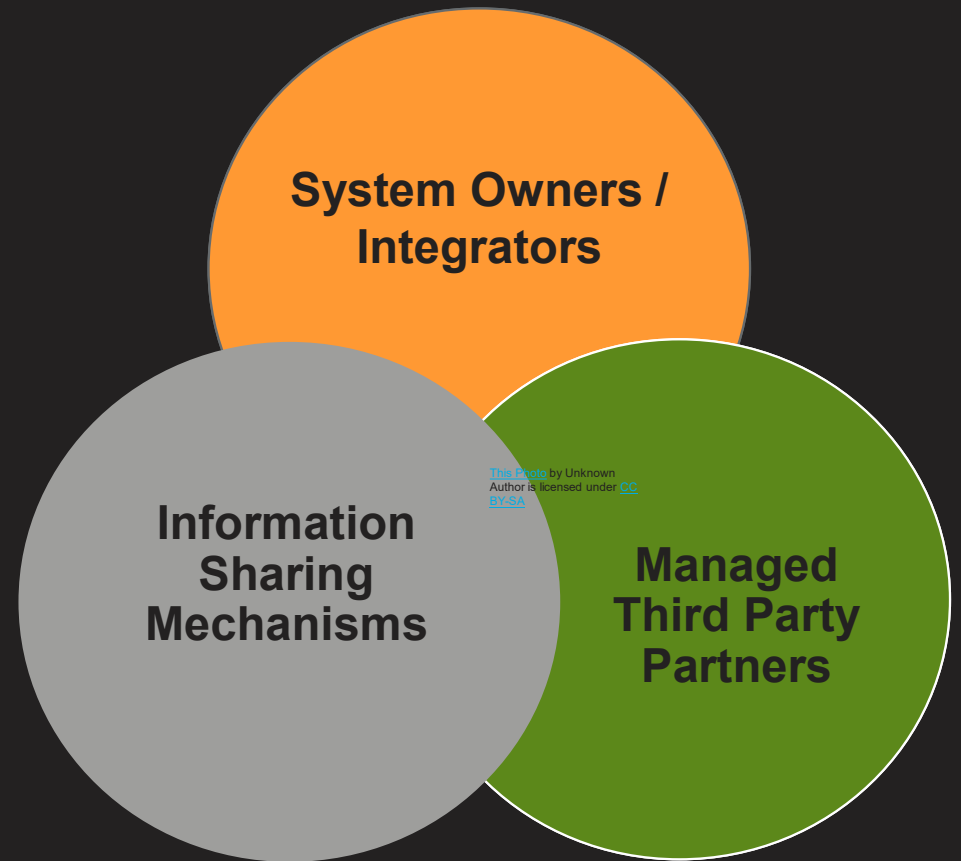
- Vendor/Product Choice Oversight
- Guiding Client Choice for Best Practice
- Evaluation of Partners for Third-Party Risk
- Include them in TableTop Exercises

[This Photo](#) by Unknown Author is licensed under [CC BY-NC](#)



Risk Landscape

Who's at Risk?



[This Photo](#)

[CC BY](#)

[This Photo](#) by Unknown
Author is licensed under [CC BY-SA](#)

[This Photo](#)

[CC BY-SA](#)



Protect Your Connected Systems With Services You Can Count On

Let our Connected Systems team elevate your security and peace of mind. Contact us today to see how we can secure your organization for the future.

directdefense.com/connected-systems

1-888-720-4633

cwalcutt@directdefense.com

