



**MINUTES OF THE REGULAR MEETING
OF THE
CYBER & PHYSICAL SECURITY COMMITTEE
January 25, 2022**

Table of Contents

<u>Subject</u>	<u>Page No.</u>
Introduction	2
1. Adoption of the January 25, 2022 Proposed Meeting Agenda	2
2. Motion to Conduct an Executive Session	2
3. Motion to Resume Meeting in Open Session	2
4. DISCUSSION AGENDA:	2
a. Cyber Security Update	2
b. Physical Security Update	8
5. CONSENT AGENDA:	10
a. Adoption of the Minutes of the Meeting held on July 27, 2021	10
6. Next Meeting	10
Closing	10

Minutes of the regular meeting of the New York Power Authority's Cyber and Physical Security Committee held via video conference at approximately 8:35 a.m.

Members of the Cyber & Physical Security Committee present were:

Michael Balboni - Chairman
John R. Koelmel
Eugene L. Nicandri
Dennis Trainor
Bethaida González

Also in attendance were:

Justin Driscoll	Interim President and Chief Executive Officer
Joseph Kessler	Executive Vice President & Chief Operations Officer
Lori Alesio	Executive Vice President & Interim General Counsel
Adam Barsky	Executive Vice President & Chief Financial Officer
Kristine Pizzo	Executive Vice President & Chief HR and Administrative Officer
Sarah Salati	Executive Vice President & Chief Commercial Officer
Robert Piascik	Chief Information & Technology Officer
Phil Toia	President NYPA Development
Yves Noel	Senior Vice President – Strategy & Corporate Development
Keith Hayes	Senior Vice President – Clean Energy Solutions
Patricia Lombardi	Senior Vice President – Project Delivery
Daniella Piper	Vice President – Digital Transformation / Chief of Staff
John Cabral	Vice President - Digital Services Delivery
Karen Delince	Vice President & Corporate Secretary
Eric Meyers	Vice President & Chief Information Security Officer
John Canale	Vice President – Strategic Supply Management
Shirley Marine	Vice President – Enterprise Shared Services
Steven Kalashian	Vice President – Human Resources & Organizational Development
Lawrence Mallory	Senior Director – Physical Security & Crisis Management
Adrienne Lotto Walker	Senior Director – Energy Security & Resilience Programs
Victor Costanza	Senior Director – Configuration Control and Deputy CISO
Bryan Chan	Director Market Analysis & Hedging
Christopher Vitale	Financial Performance & Reporting Manager
Carly Hume	Chief of Staff
Lorna Johnson	Senior Associate Corporate Secretary
Sheila Quatrocci	Associate Corporate Secretary

Chairman Balboni presided over the meeting. Corporate Secretary Delince kept the Minutes.

Introduction

Member John Koelmel said that he will be Acting as Committee Chair until the arrival of Chair Michael Balboni. He welcomed the committee members and the Authority's senior staff to the meeting. He said that the meeting had been duly noticed as required by the Open Meetings Law and called the meeting to order pursuant to Section B(4) of the Cyber and Physical Security Committee Charter.

1. Adoption of the January 25, 2022 Proposed Meeting Agenda

On motion made by Member Eugene Nicandri and seconded by Member Bethaida González, the January 25, 2022 meeting agenda was unanimously adopted.

2. Motion to Conduct an Executive Session

On motion duly made by Member Eugene Nicandri, seconded by Member Bethaida González, and unanimously adopted, an Executive Session was held pursuant to the Public Officers Law of the State of New York §105, to discuss matters regarding public safety and security.

3. Motion to Resume Meeting in Open Session

On motion made by Member Eugene Nicandri, seconded by Member Bethaida Gonzalez, and unanimously adopted, the meeting resumed in Open Session.

Chairman Balboni stated no votes were taken during the Executive Session.

4. DISCUSSION AGENDA

a. Cyber Security Update

Mr. Eric Meyers, Vice President and Chief Information Security Officer, and Mr. Victor Constanza, Deputy Chief Information Security Officer, presented an update on the Authority's Cyber Security Program.

Mr. Meyers said that in 2021, the cyber program continued to evolve. The Authority faced an unprecedented year in the cyber threat landscape with the widely publicized Solar Winds vulnerability, a seemingly endless list of high-profile ransomware breaches, ending with a high-profile zero-day vulnerability called Log4J, which the team continues to manage.

As Cyber Security continues to evolve its program, the team took an independent view of its capabilities and maturity to make sure that the Authority was keeping pace with the evolving threat landscape. To that end, the team conducted its first independent assessment of its overall program to measure its capability using the new Cyber Security Framework. They also conducted detailed ransomware readiness assessments and Table-top exercises to assess response and recovery capability.

The NIST CSF Assessment is a midstream assessment of current improvements. It covers over 100 different elements of an overall cyber security program across five key domains. This assessment will continue be repeated annually and will allow Cyber Security to understand how it impacts maturity; measure its maturity against its target state; and inform future investment decisions.

Cyber Security 2022 Plan

Mr. Victor Costanza, Deputy Chief Information Security Officer, said that in order to address the evolving threat landscape and enhance the cyber collective defense capabilities and partnerships, Cyber Security has a number of capability improvement projects being implemented in 2022, many of which are already being executed as part of a phased approach, and will be a continuation of the existing Strategic Plan. This includes the Identify and Access Management Program which is a critical foundation for managing user, customer and privileged access management, enhancing the 24-by-7 security event response capabilities, expanded network segmentation of the internal environment for enhanced containment of threats, and threat and vulnerability management tracking integration with the new IT service and asset management platform for greater efficiency and for remediation.

He continued that, as Cyber Security approach the end of its five-year Cyber Security Roadmap this year, the team will further develop and build upon those areas identified in the roadmap to help shape the updated Cyber Resilience Roadmap for 2023, and beyond, with NYPA VISION2030 journey.

Chair Balboni added that Cyber Security is in a period of intense activity as it relates to cyber-attacks. The federal government has recently gotten involved as it relates to zero-trust capability, and Cyber Security is working on providing resources to detect, mitigate and respond to attempts to get into the networks. The Authority has taken on this mission, especially in light of its Digitization Pillar, to make sure that the privileged accesses in the networks are always monitored and secure.



Cyber Security Update

Eric Meyers
VP, Chief Information Security Officer

Victor Costanza
Deputy Chief Information Security Officer

January 25, 2022

2

Executive Summary

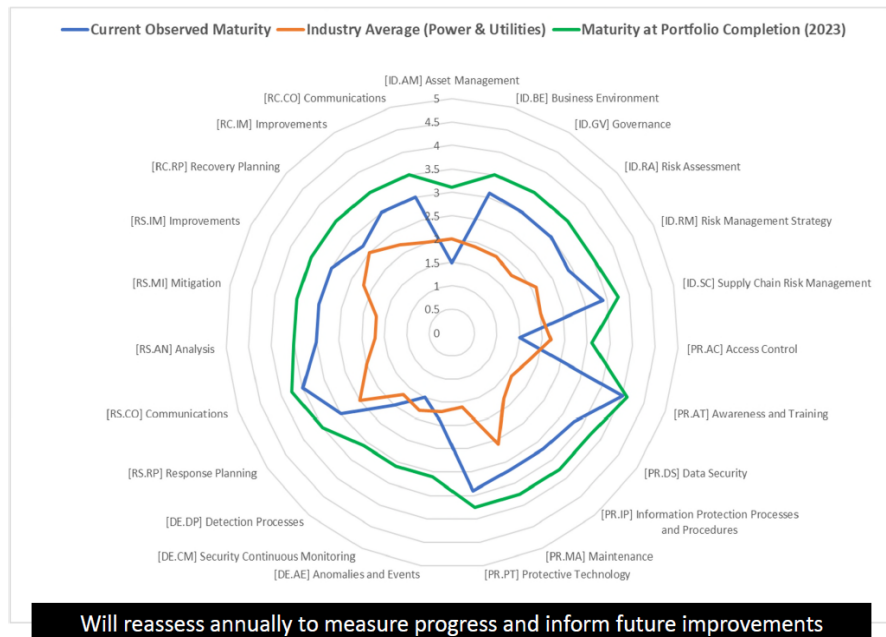
- Significant improvements delivered during 2021...
 - Launched **security automation** platform to speed detection & response
 - Introduced **behavioral analytics** to help detect never-seen-before attacks
 - Deployed a **protected backup solution** for increased ransomware resilience
 - Introduced a Cyber Collective Defense Consortium to protect the broader NYS ecosystem
- Overcame Increasing Challenges
 - Supply Chain Risks – SolarWinds, Kaseya
 - Increasing ransomware threats
 - Numerous high-profile zero-day vulnerabilities announced – Log4j
- Independent assessments to measure our capability
 - NIST Cyber Security Framework (CSF)
 - Ransomware Readiness Assessment
 - Adversary Attack Simulation
 - Table-top exercises to assess response and recovery capability
- Our 2022 Plan will keep us ahead of the threat landscape
 - Identity & Access Management Program
 - SOC Capability Expansion
 - System hardening and configuration enhancements

2021 By The Numbers:

236K - Threats blocked/day
68% - YoY increase in alerts/day
96% - Security tools coverage rate
10 - Drills and exercises completed
5 - Pilot deployments at muni/coops
0 - Material cyber security incidents



NIST CSF Assessment



Key Takeaways:

- Comprehensive assessment covering over 100 program elements across 5 domains
- NYPA overall compares favorably to industry peers in the study
- Currently funded program will continue to improve maturity through year-end 2023

Scoring Criteria:

- 1 - Initial: Ad-hoc processes
- 2 - Repeatable: Processes defined to where procedures are followed by different people performing the same task
- 3 - Defined: Processes more rigorously defined and documented using standards, procedures and tools
- 4 - Managed: Quantitative objectives are for quality and performance are established
- 5 - Optimized: Processes refined to a level of leading practice. Quantitative continuous improvement in place



NY Power
Authority

Canal
Corporation

2022 Plan

4

Identity & Access Management Program

- IDAM Strategy Implementation to support VISION2030
- Privileged Access Management focus

Security Operations Center (SOC) Capability Expansion

- Enhance Internal 24/7 SOC capabilities and process optimization
- Build Cyber Testbed/Range Architecture

Hardening and configuration enhancements

- Firewall Upgrades/Replacements
- System baseline hardening
- Additional network segmentation
- Integration of MDR solution for offline backups

Next Generation Security Architecture

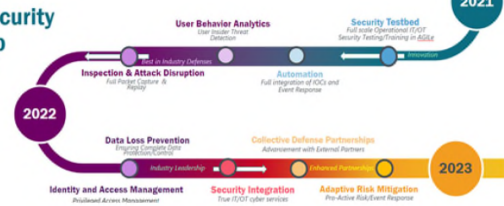
- Security Reference Architecture
- Building in Zero-trust objectives

Continued Foundational Improvements

- Governance Refresh for secure digital enablement
- DLP Capability & Coverage Expansion
- TVM and Cyber Operations Tracking and Metrics enhancements (ITSM integration)
- ICS intrusion detection system implementation with OT
- Partnerships: Cyber Solutions/Pilots for AGILE/Cyber Collective Defense Consortium (CCDC)

Cyber Security Roadmap

2020-2023
3 Year Plan



5



NY Power
Authority

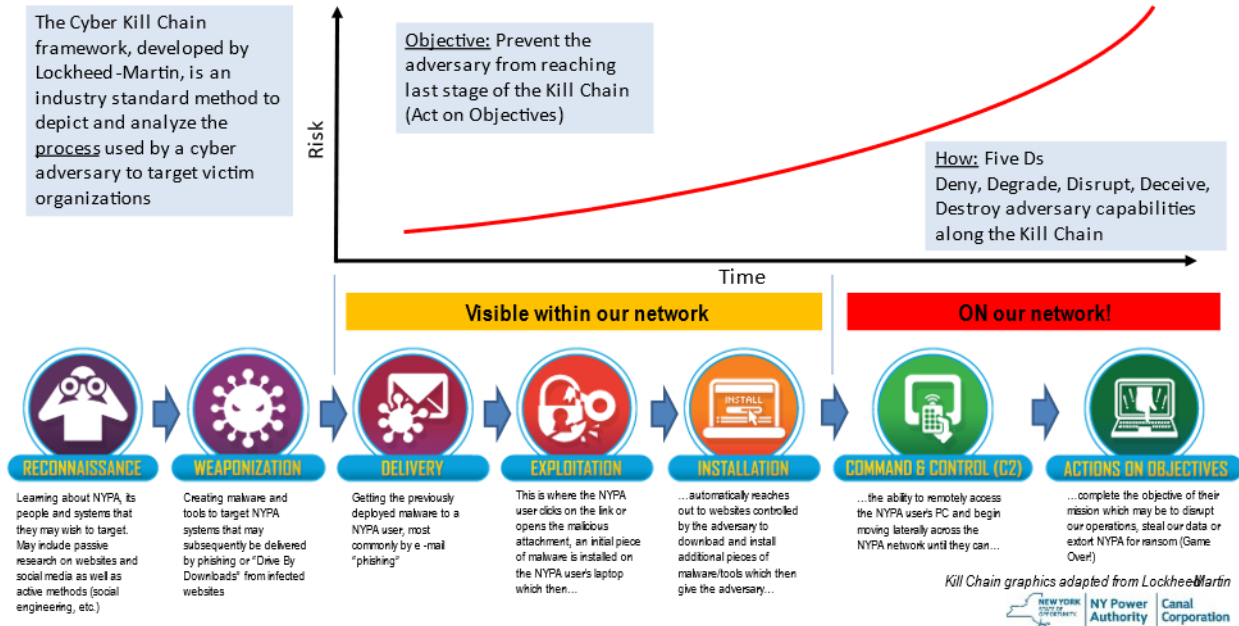
Canal
Corporation

6

Appendices/Backup Slides

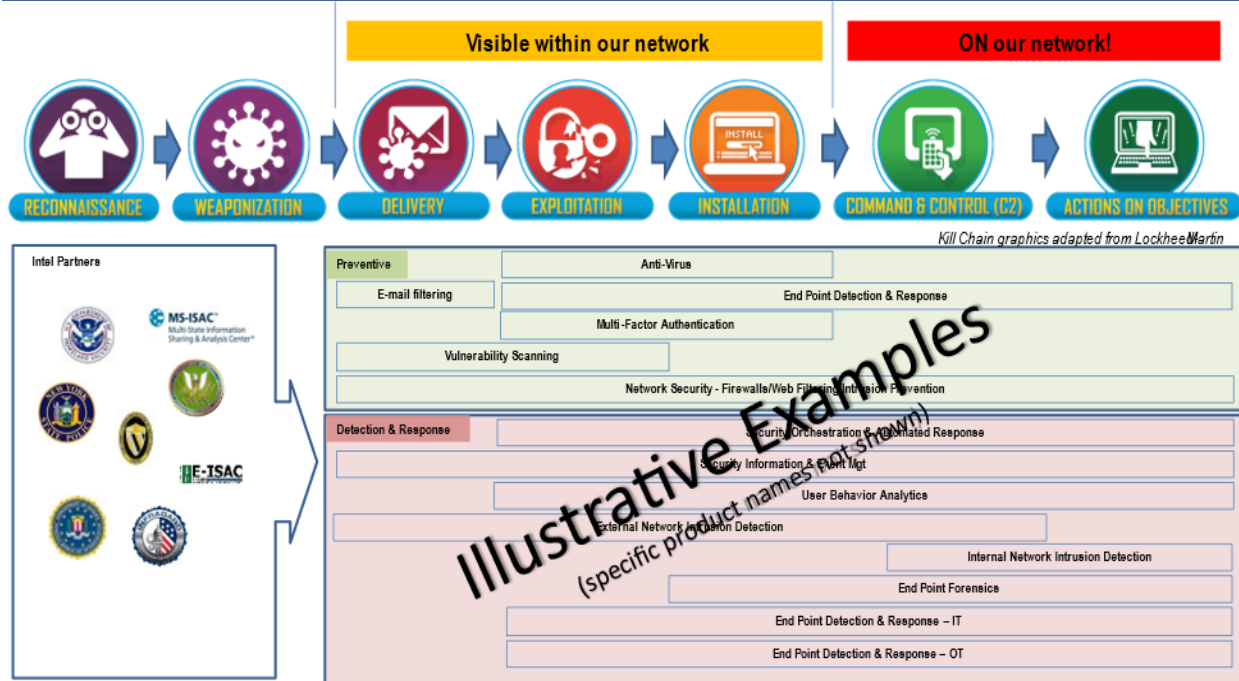
Cyber Kill Chain – How the bad guys work

7



Cyber Kill Chain – How NYPA responds to the bad guys (capabilities schematic)

8



b. Physical Security Update

Mr. Larry Mallory, Senior Director of Security & Crisis Management, provided an update on security-related regulatory activities.

NYPA completed the Crescent-Vischer Ferry Emergency Action Plan Tabletop Exercise, 2021, as required by the Federal Energy Regulatory Commission.

NYPA security leveraged the Emergency Action Plan exercise to test its security response, threat escalation and communication plans, enterprise wide. In addition to the typical physical security issues, the team included topics which can influence security, such as misinformation or disinformation campaigns, simulated activities, and threat alert notifications, which led to the implementation of the Authority's response plans.

In September, NYPA was the subject of a North American Electric Reliability Corporation ("NERC") Critical Infrastructure Protection Standard Audit. This comprehensive audit covers a number of disciplines. The response to this audit was led by the Authority's Reliability Standards and Protection team and resulted in zero violations, which speaks to the culture of compliance which NYPA has implemented and fostered.

Through its participation in NERC's Physical Security Advisory Group, NYPA is also working with NERC in the Electric and Information Training Center to update the Physical Security Design Basis Threat ("DBT") document and develop an industry training on the application of the DBT. The members will be provided with an update on the progress of the DBT at future meetings.



Physical Security Update

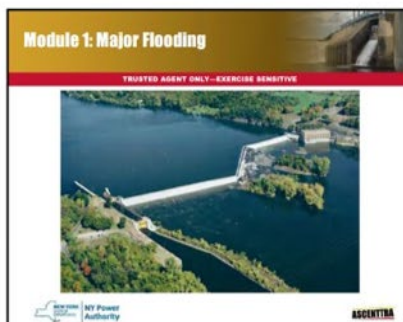
Larry Mallory

Sr. Director Security & Crisis Management

January 25, 2022

2

Regulatory Activity



5. CONSENT AGENDA

On motion made by Member John R. Koelmel and seconded by Member Bethaida González, the following item on the Consent Agenda was unanimously adopted.

- a. Adoption of the Minutes of the New York Power Authority Cyber & Physical Security Committee held on July 27, 2021

6. Next Meeting

Chairman Balboni said that the next regular meeting of the Cyber and Physical Security Committee will be held on Tuesday, July 26, 2022.

Closing

On motion made by Member John R. Koelmel and seconded by Member Bethaida González, by unanimous vote, the meeting was adjourned by Chairman Balboni at approximately 9:47 a.m.

Karen Delince

Karen Delince
Corporate Secretary