



# IT/OT CONVERGENCE

By Rafael Oquendo

# ABOUT ME

“Do what you love and the rest will follow”

## EDUCATION

Master's of Science in  
Computer Science

Advanced Project  
Management Certificate

## WORK HISTORY

Linux Security Administrator

Full Stack Developer

Project Manager

Compliance/Auditing

US Navy (Operation Enduring  
Freedom and Operation Iraqi  
Freedom)

## CURRENT ROLE

Information System Analyst at  
Consolidated Edison of New  
York

- DLP
- Mobile Application Security
- Support OT groups
  - NERC CIP Compliance Program



# AGENDA

IT/OT Convergence

IT/OT Challenges

Mitigation Strategies

Q&A

# IT/OT CONVERGENCE

## REGULATORY REQUIREMENTS

Data

Equipment

Dependencies

## OT DEVICES AND THE INTERNET

Maintenance

Data Acquisition

Smart Grids

## BIG DATA/ DATA ANALYTICS

Visibility

Modelling

Forecasting

# IT/OT CHALLENGES



Regulations

Evolving



Culture

CIA / AIC



Asset Management

Visibility



# MITIGATION STRATEGY



Regulations

NERC CIP Committee

Validate

Internal/External Audit

# MITIGATION STRATEGY



Culture

Liaison

NERC CIP Committee

Cross Training

# MITIGATION STRATEGY



Asset Management

IT Project Management Office (ITPMO)

Asset Management Tools

Asset Tagging





Thank you  
Questions?

# SOURCES

## FOR EDUCATIONAL PURPOSES ONLY

Presentation Template is provided by PowerPoint 2016

Regulation image on Slide 5,6:

<http://www.insurancejournal.com/news/east/2016/09/15/426583.htm>

Culture image on Slide 5,7:

[indiatoday.in](http://indiatoday.in)

Asset Management image on Slide 5,8 :

<https://www.information-age.com/saving-it-asset-management-301811/>