

The Evolution of the Ontario's Electricity Sector Cyber Security Framework

Over-the-Horizon

Ken Craft, *Director IT Security and Risk at Alectra Utilities Corporation*

ken.craft@alecrautilities.com

Marianne Blasman, *VP of IT Services at Waterloo North Hydro Inc.*

mblasman@wnhydro.com

Catherine Ethier, *Policy Advisor at Ontario Energy Board*

catherine.ethier@oeb.ca



Ken Craft - Introduction



Ken Craft holds the position of Director, IT Security & Risk at Alectra Utilities (formerly Horizon Utilities). Ken holds a number of prestigious Security Certifications as CISM, CISSP, and others.

Ken has held various positions within the IT Security field with increasing authority within the banking, consulting, higher education and Energy Sectors. He has over 25 years of experience in the Information Technology Security Profession with extensive knowledge and comprehensive understanding. Ken excels in all IT Security aspects and as a security professional, he understands various system complexities. He is very passionate about protecting the utility sector's extended enterprise and servicing the public welfare. Ken also has the capacity to reach out and promote the importance of operational practices that ensure security.

Currently, Ken has been elected as the Chair of the industry's Cyber Security Advisory Committee (CSAC). He is an active leadership member of various industry working committees.

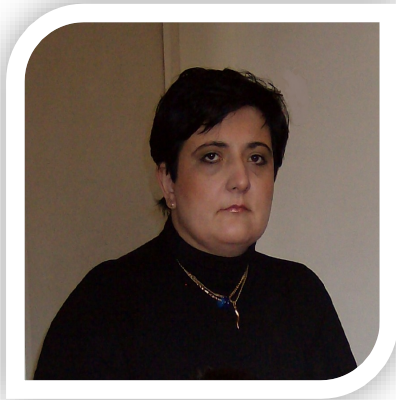
Marianne Blasman - Introduction



Marianne Blasman is the Vice President of Information Technology Services at Waterloo North Hydro. She is a seasoned business executive with a Bachelor of Mathematics (Computer Science) and Business Administration from the University of Waterloo. Marianne has held various positions of increasing authority within the Private and Energy Sector.

She has over 25 years of experience in the Information Technology Services Profession with extensive knowledge and comprehensive understanding of quality system application solutions, their technology, integration and design. She is a results-oriented and effectual leader with talent for proactively establishing effective security controls, strategic culture shift and business transformation. Marianne is also an active leadership member of various industry working committees including the industry's Cyber Security Advisory Committee (CSAC), the Smart Meter Entity Steering Committee (SSC) and the Data Strategy Advisory Council.

Catherine Ethier-Introduction



Catharine Ethier is a Policy Advisor at the Ontario Energy Board, who is leading the transition of the Ontario Cybersecurity Framework to the industry. She held a number of senior positions over her distinguished engineering career in the energy, automotive and space industry.

With a broad range of professional qualifications, which include Master's Degree in Mechanical Engineering and Master's Degree in Robotics, Catherine specializes in Regulatory Compliance and Strategic Business Transformation. Her past assignments include successful tenures at a number of large multinational enterprises, Fortune 500 and Ontario Government.

Catherine also supports many community endeavors. She brings big picture thinking to drive long-term, sustainable outcomes for the program portfolio she leads.

Agenda

Cyber Security Initiative :

- Background and OEB Direction
- Framework Sustainment Mechanisms
 - ✓ *Cyber Security Advisory Committee (CSAC)*
 - ✓ *Cyber Security Information Sharing (IESO)*
 - ✓ *Cyber Security RRR Reporting*
- Cyber Security Advisory Committee (CSAC)
 - ✓ ToR, Mandate & Governance
 - ✓ Objectives and Strategic Priorities
- Actions to Date & Plans

Ontario Cyber Security Framework

Aesop's Fable:



An old man on the point of death summoned his sons around him to give them some parting advice. The man asked his sons to bring a bundle of sticks and told them to break it in two. When none of the sons could break the bundle, the old man took the sticks and broke them one by one with his weak hands.

The Moral of the story is that when it comes to Cyber Security we are stronger together than apart.

Framework Evolution

2016

Phase 1 – Develop Framework

- Formation of CSWG and Steering Committee
- Interim reporting, annual certification
- Sector executive steering committee, distributor working group, expert consultant & OEB
- Post proposed amendments
- Framework version 0.1

2017

Phase 2 – Stakeholder Engagement

- Issue Code Amendments (TSC and DSC)
- Interim Reporting
- CSWG – Annual Reporting
- IESO Licence Amendment with CS Information Sharing
- CS sustainment mechanisms (CSAC and IESO) established

2018

Phase 3 – Evaluation

- Annual reporting (RRR)
- CSAC Engagement
- Regulatory communications with other jurisdictions
- CSIS: develop security information sharing

2019

Phase 4 – Enhancements

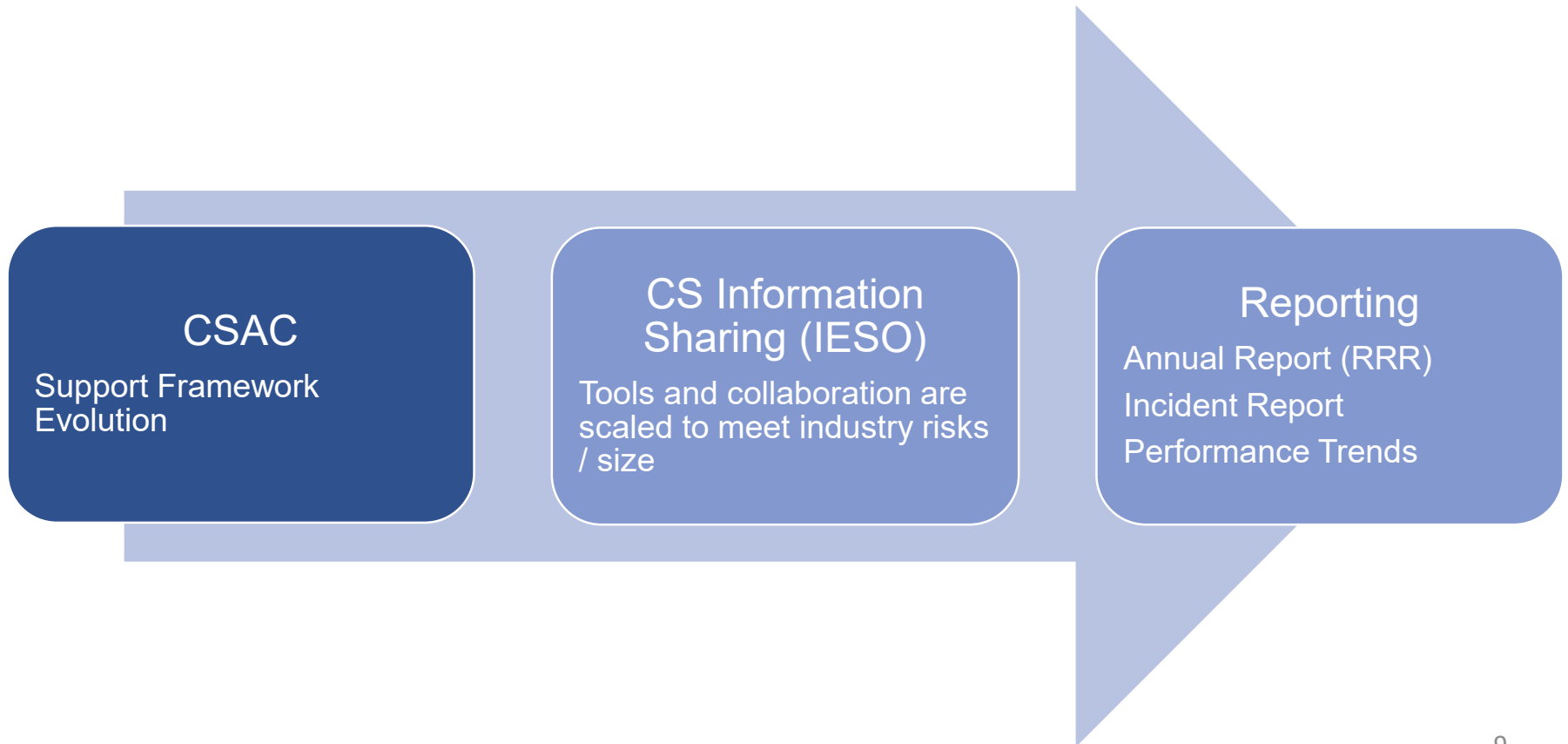
- CSAC: Framework version 2.0 – Incorporate Lessons Learned improvements
- Enhancement of Information Sharing

Implementation

OEB Direction for CSAC

- Direction:
 - The industry should own & implement the Ontario Cyber Security Framework
- Rationale:
 - Cyber Security is one element in the organization's Risk Portfolio
- Role of OEB:
 - Facilitate transition of Framework Ownership to the Industry
 - Facilitate formation of a Cyber Security Advisory Committee (CSAC)
 - Develop sustainability processes and supporting tools
 - Observe and assess the industry's Cyber Security Readiness

Framework Sustainment Mechanisms



CSAC Terms of Reference

- CSAC Terms of Reference (Finalized)
- CSAC Mandate:
 - The CSAC is an industry-led committee that will improve / evolve the Framework, as guided by an evolving cyber security landscape and industry best practices.
- CSAC Purpose:
 - CSAC is to promote the Ontario Electricity Sector's understanding of and provide general advice for the ongoing development of the Framework.
 - Facilitate industry outreach and support with respect to the implementation of changes to the Framework.

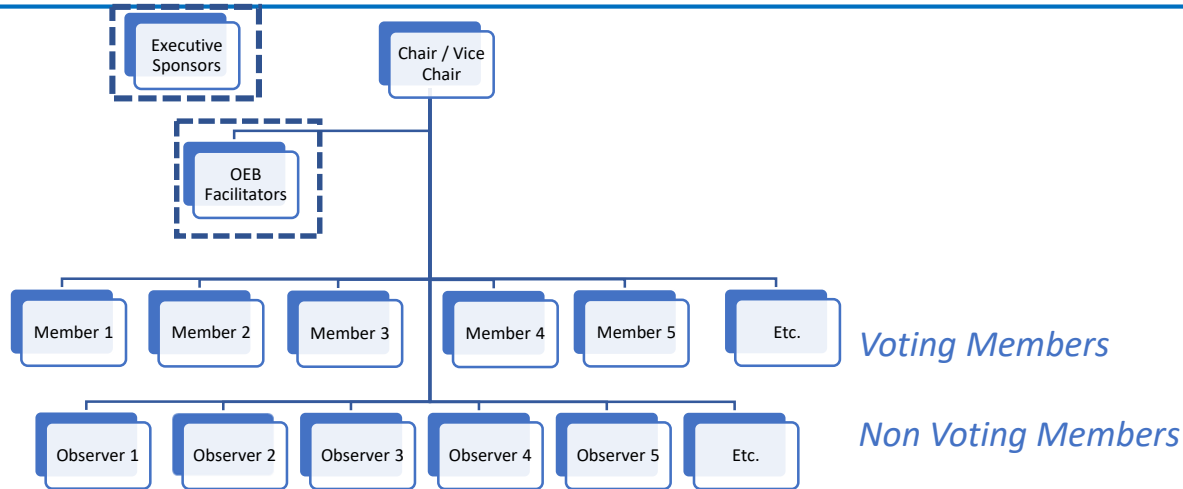
CSAC Objectives

- Navigate the Framework implementation & evolution
- Advice and recommendations to bridge the gap between the industry and regulatory bodies
- Harmonize the Framework with other standards and Frameworks (NIST, C2M2 & privacy by design); align with legislation and regulatory practices
- Broad industry outreach in communicating and supporting the implementation of changes to the Framework
- Provide feedback and recommendations to the OEB as requested

Strategic Priorities

- Work closely with the IESO on the Information Sharing initiative
- Ensure the framework is aligned with any changes in NIST or privacy legislation
- Assist LDC's (big and small) with the implementation of the Framework

CSAC Governance



Members

- Review meeting materials and action items prior to each meeting and prepare discussion points to incite productive dialogue
- Identify and provide improvements to the Framework
- Present views to inform and obtain feedback
- Make a reasonable effort to reach group consensus

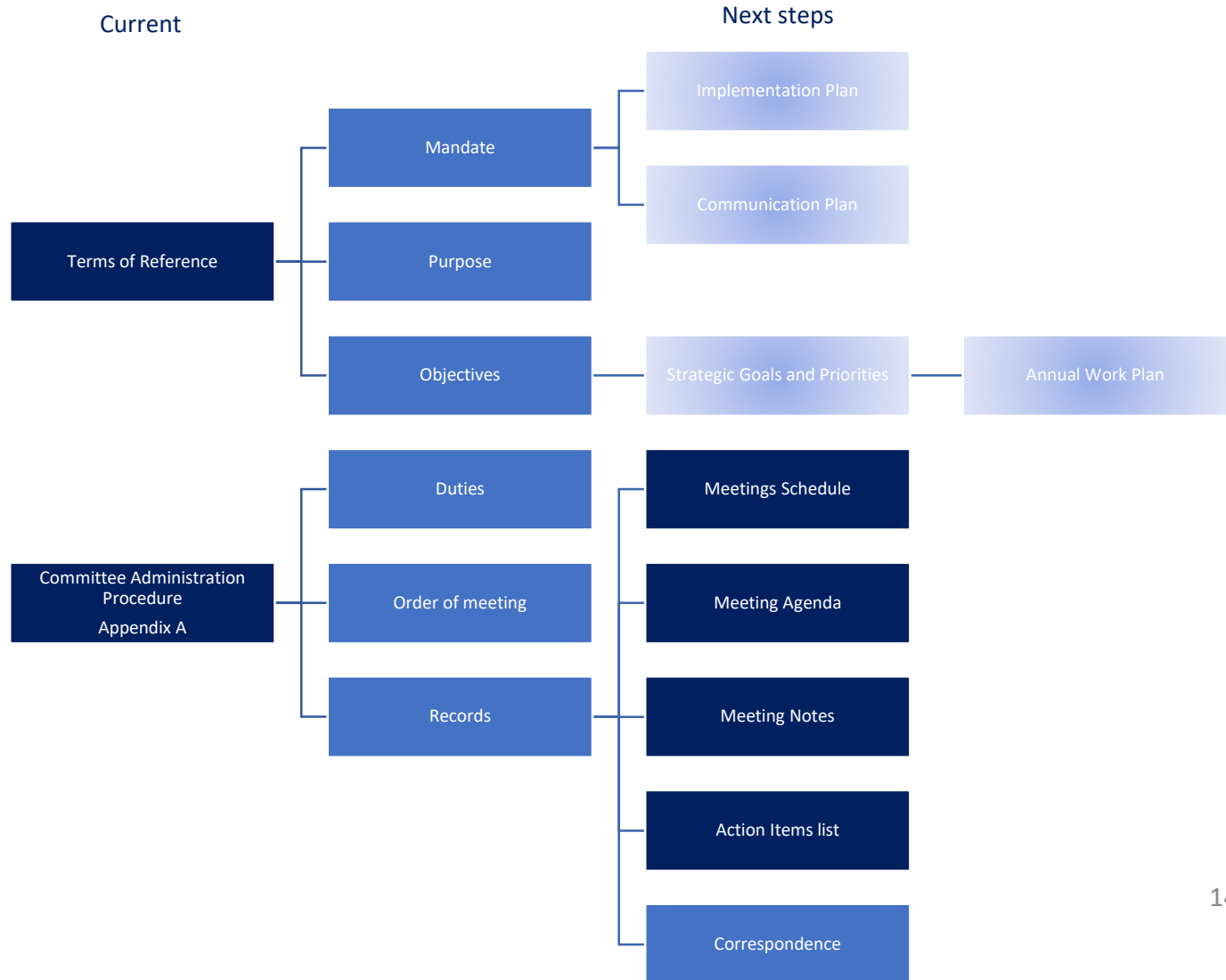
OEB

- Liaise the communication between CSAC and the OEB
- Actively observe CSAC
- Review and endorsement of the TOR

Transition Support

- Facilitate and support the establishment of CSAC
- Project management and process development

CSAC Governance Protocols



CSAC Member List

CSAC Member List	Organization
Ken Craft (Chair) Marianne Blasman (Co-chair) Ben Blakely Catherine Ethier (OEB Facilitator) Christine Dade Dave Cullen David Leonce Evan Noble Greig Cameron John Matos Jojo Maalouf Kathi Farmer Kenneth Robertson Larry Lam Lori Gallagher Nick Powers Patricia Klayh Paul J. Martinello Preslav Rusev Rick Haier Ryan Holder	Alectra Utilities Corporation Waterloo North Hydro Inc. Independent Electricity System Operator Ontario Energy Board Ministry of Energy, Northern Development and Mines Entegrus Powerlines Inc. Westario Power Inc. Independent Electricity System Operator Kitchener-Wilmot Hydro Inc. Burlington Hydro Inc. Hydro Ottawa Electricity Distributor Association Cornerstone Hydro Electric Concepts Inc. Veridian Connections Inc. Utilities Standards Forum Peterborough Distribution Incorporated Mearie Group Insurance Energy+ Inc. Toronto Hydro-Electric System Limited Hydro One Networks Inc. Ontario Energy Board

CSAC Actions to Date

June 2018 - Inaugural Meeting

- Elected Chair, Vice Chair & Stakeholder Discussions
- Established Governance

July, September, November 2018 – 2nd, 3rd and 4th Meeting

- Terms of Reference (TOR)
- Mandate and Governance
- Administration Procedure
- Initiate Work Plan and Communication Plan
- Cyber Security Information Sharing (IESO)

December 2018 - Engagement Outreach with the LDCs
(*over 75 participants from LDCs and other agencies*)

Annual Work Plan

Includes High Level Projects or Working Areas

- Executive Sponsorship Model (work in progress)
- Engagement and outreach
 - Communication Plan
 - EDIST (January 16th -“The Evolution of the Ontario’s Electricity Sector Cyber Security Framework: Over-the-Horizon”)
 - LDC engagement and communication outreach
 - Web site development (work in progress)
 - Email: cybersecurity@oeb.ca attn. CSAC
- Framework evolution
 - Framework Review
 - Change Proposal
- Liaison with the IESO’s Cybersecurity Information Sharing
- Funding and resources
- Facilitate Framework Implementation

Next CSAC Meeting

Meeting Scheduled for every third Thursday of the month	2018												2019											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Last updated: 9/4/2018																								
Kick off Meeting						14																		
Meeting #2							26																	
Meeting #3								25																
Meeting #4									15															
Meeting #5										31														
Meeting #6 (Deliver Report to the OEB)											21													
Meeting #7												18												
Meeting #8													16											
Meeting #9														18										
Meeting #10															19									
Meeting #11																21								

Next CSAC Meeting on January 31th

Questions



Email: cybersecurity@oeb.ca attn. CSAC