E-ISAC Update

Manny Cancel
Technology and Security Committee Open Session
February 9, 2022
• Membership Outreach – Member Executive Committee (MEC)
• Threat Landscape
• Operational Technology (OT) Visibility and Joint Cyber Defense Collaborative (JCDC) support
• Other Activities
• Grid Ex VI Recap
Member Executive Committee

• Established by the ESCC to serve as a customer advisory board to the E-ISAC and provide senior industry leadership expertise and guidance to inform the strategic direction of the E-ISAC and increase value to the electricity sector

• Provides strategic-level input on:
  o E-ISAC’s strategic plan
  o Operational focus areas
  o Budget development
  o Performance metrics
## Member Executive Committee

<table>
<thead>
<tr>
<th>MEC Member</th>
<th>Company</th>
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<tbody>
<tr>
<td>Bill Fehrman (Chair)</td>
<td>Berkshire Hathaway</td>
</tr>
<tr>
<td>Ann Delenela</td>
<td>Entergy</td>
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<tr>
<td>Eóin Cooke</td>
<td>AltaLink</td>
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<tr>
<td>Jim Jones</td>
<td>Great River Energy</td>
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<tr>
<td>Jim Robb</td>
<td>NERC</td>
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<tr>
<td>Margaret Hopkins</td>
<td>Puget Sound Energy</td>
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<tr>
<td>Mike Fish</td>
<td>Salt River Project</td>
</tr>
<tr>
<td>Scott Smith</td>
<td>City of Bryan Texas</td>
</tr>
<tr>
<td>Steve Swick</td>
<td>AEP</td>
</tr>
<tr>
<td>Tom O’Brien</td>
<td>PJM</td>
</tr>
<tr>
<td>Tom Wilson</td>
<td>Southern</td>
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</table>
• Outreach conducted to discuss expectations for E-ISAC
  ▪ Information sharing and curated analysis
  ▪ Support for key programs (e.g., CRISP, OT Visibility, Automated Information Sharing)
  ▪ Additional collaboration with Natural Gas Sector

• Other observations
  ▪ What is status of E-ISAC Long-Term Strategic Plan?
  ▪ Cadence and value of MEC Meetings
  ▪ Enhance value by driving increased engagement and action
**Next Steps**

- Reduce number of MEC Meetings
  - April 2022 meeting will be canceled
- Work with MEC members to identify opportunities to increase the value of meetings and engagement, and improve overall content
- Engage members on strategic topics
Long-Term Strategic Plan

• Provide timely and actionable information and facilitate increased information sharing
  ▪ 48% increase in E-ISAC products in 2021
  ▪ Supply chain, ransomware, critical vulnerabilities
  ▪ Automated information sharing pilot (ESSIX)

• Enhance the E-ISAC’s analytical capabilities
  ▪ OT Visibility (Dragos/Essence) and CRISP OT Pilot
  ▪ Project Lighthouse
  ▪ Joint Cyber Defense Collaborative (JCDC) support

• Increase focus on operational technology risks
  ▪ OT Visibility and CRISP/Essence OT Pilot
Long-Term Strategic Plan (cont’d)

- Enhance the E-ISAC’s capability to leverage classified and other critical threat and intelligence information
  - Increased participation in classified briefings
  - New threat intelligence sources
- Explore extending services to other sectors
  - Increased collaboration with natural gas and other critical infrastructure sector
    - Log4j
    - Ransomware
    - Geopolitical tensions
• Geopolitical tension
• Log4j vulnerability
• Conti ransomware
• Domestic violent extremists threats
• Geopolitical tensions
• Insider Threat
• Operational Technology (OT) Visibility
  ▪ Deployments continue across the sector
  ▪ E-ISAC CTI team monitoring Neighborhood Keeper
  ▪ Coordinating with DNG-ISAC on gas related queries
• CRISP OT Dragos/Essence pilots
• Joint Cyber Defense Collaborative (JCDC) support
  ▪ Coordination with DOE and DHS
• CRISP Expansion
• E-ISAC Portal
• ESSIX (Automated information sharing)
• Membership outreach and industry engagement
• 2023 Business Plan and Budget development
<table>
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<tr>
<th>Participating organizations by sector:</th>
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<td>Chemical</td>
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<td>Communications</td>
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<td>Critical Manufacturing</td>
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<td>Emergency Services</td>
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<td>Financial Services</td>
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• Send out planning materials earlier
• Encourage greater collaboration between utilities and reliability coordinators
• Continue to allow/encourage planners to customize the exercise (MSEL, scenario, injects, etc.) to meet their objectives
• Expand NERC’s participation in GridEx VI by testing alternative communications to simulate email being compromised
• Continue to host website with planner documents; provide greater clarity on access and troubleshooting
• Key themes:
  - Operational coordination Telecommunications and Gas
  - Government authorities (e.g. Grid Security Emergency Orders)
  - Security of inverter-based resources
  - Narrative warfare/mis-information
• Continue current activities:
  ▪ Build effective communications mechanisms
  ▪ Build on the shared consensus regarding Grid Security Emergency Orders
  ▪ Coordinate between the electricity and natural gas providers
  ▪ Reinforce relationships between governments in the United States and Canada

• Clarify ESCC/government roles with crisis communications

• Strengthen operational coordination between electricity and communications
Next Steps

- Finalize after action report
- Identify action items and identify individuals to support
- Conduct briefing in March/April to summarize report and action plan
Questions and Answers
ERO Enterprise Align Project

Stan Hoptroff, Vice President, Business Technology
LaCreacia Smith, Senior PMO Manager, ERO PMO
Technology and Security Committee Open Meeting
February 9, 2022
• Align Release 3 Functionality
• Align Release 3 Lessons Learned
• Align Release 4 Functionality
• Align Project Timeline
• Canadian Update
• Current Challenges
• How to Stay Informed
Release 3 Functionality
• Audit Scope
• Audit Notification Package
  ▪ Audit Notification Letter
  ▪ Pre-Audit survey
• CMEP Staff Working Papers
  ▪ Secure Evidence Locker Reference Number
  ▪ Status
  ▪ Actions (Potential Noncompliances, Areas of Concern, etc.)
• Regional Notes
  ▪ Compliance Culture
• Findings Created for Enforcement
• Final Audit Report Generation
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## Scheduled Engagements Dashboard

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**Note:** The table data is provided for informational purposes and may contain errors or omissions.
### Working Papers

<table>
<thead>
<tr>
<th>OBJECT</th>
<th>ASSIGNED TEAM MEMBERS</th>
<th>RSAW STATUS</th>
<th>REVIEW STATUS</th>
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• Our performance testing program was inadequate
• The migration of historical records impacted Periodic Data Submittals and Self-Certification, both of which are bulk processes
• Software updates deployed separately from additional functionality
Align Release 4 Functionality

- Audit Enhancements
- Scheduling Enhancements
- Inherent Risk Assessment
- Compliance Oversight Plan
• Requirements Gathering in Progress
• Implementation Plan (under review)
  - Manitoba & Saskatchewan (MRO) – Q2 2022
  - Alberta & British Columbia (WECC) – Q3 2022
  - Nova Scotia (NPCC) – Q4 2022
Align Timeline

AUDIENCE IMPACT KEY

- Registered Entities
- ERO Enterprise Staff

**In progress**

- R3 Deploy to Production
  - Dec 2021

- R4 Dev/Test/UAT
  - Nov 21 – July 22

- Canadian Provinces Requirements
  - March 1

- Release 4 in Production
  - Q3-Q4 2022

- Remaining Canadian Provinces
  - TBD

- Retire Legacy Systems
  - TBD

**Complete**
Current Challenges

• **Project Fatigue:** Maintaining team and stakeholder engagement

• **People:** Parallel efforts (R1-R3 performance and stability efforts; R4 development)

• **Technical:** Finding the right balance between our unique business needs and the platform (extensions and future upgrades)

• **Cost Management:** Balancing available funds and business requirements (enhancements)
Key communication vehicles

- Align newsletter for Regions and registered entities
- Regional Change Agent Network
- Dedicated project page on NERC.com: [Click Here](#)
- CMEP Regional workshops
- NERC News
- Social media
Questions and Answers
Moving to a common platform has provided:

- **A more secure** method of managing and storing Compliance Monitoring and Enforcement Program (CMEP) data
- Alignment of **common business processes**, ensuring consistent practices and data gathering
- A **standardized interface** for registered entities to interact with the ERO Enterprise
- **Real-time access to information**, eliminating delays and manual communications
- **Consistent application** of the CMEP
- **Ease of Access**: Ability to download all standards and requirements for use in other systems
Background and Reference Material
Align Release 1: What We Delivered

Stakeholder Group

Registered Entities

Release 1 Functionality

- Create and submit Self-Reports and Self-Logs
- Create and manage mitigating activities (informal) and Mitigation Plans (formal)
- View and track Open Enforcement Actions resulting from all monitoring methods
- Receive and respond to Requests for Information (RFIs)
- Receive notifications and view dashboards on new/open action items
- Generate report of NERC Standards and Requirements applicable to your entity
- Manage user access for your specific entity
Align Release 2: What We Delivered

Stakeholder Group

Registered Entities

Release 2 Functionality

- Create, submit, and modify Technical Feasibility Exceptions
- Create, manage and respond to Periodic Data Submittals
- Create and manage Self-Certifications
- Receive and respond to RFIs
- Receive notifications and view dashboards on new/open action items
- Manage user access for your specific entity
Align Release 3: What We Delivered

Stakeholder Group

Registered Entities

Release 3 Functionality

- Use Align for compliance monitoring engagements (Audit, Spot Checks, and Investigations)
- Ability to review audit report details
- Expand RFIs for Audits
Stakeholder Group

Registered Entities

Release 4 Functionality

- Enhanced Audit and Scheduling functionalities
- Compliance Planning (Inherent Risk Assessment and Compliance Oversight Plan)
- Expand RFIs for Compliance Planning
ERO Enterprise Business Technology

Stan Hoptroff, Vice President, Business Technology
Technology and Security Committee Open Meeting
February 9, 2022
Agenda

• Program Area Technologies
• Shared Services Technologies
• Business Technologies (IT)
Program Area Technology

- Current Investments
  - E-ISAC Portal migration to Salesforce: February 2021

- Future Investments
  - Centralized Organization Registration ERO System Enhancements
  - Generation, Transmission and Event Management tracking enhancements (previously deferred)
  - Reliability Assessment Data System
  - Situation Awareness FERC, NERC and Regions enhancements (additional data points, forced oscillation and visibility for >200kV facilities)
NERC Applications/Shared Services

- **Current Investments**
  - DC Office Buildout in support of NERC 2.0
    - Huddle Rooms
    - Conference Rooms
    - Team Rooms
    - Watch Operations (E-ISAC)
    - Extra Large Conference Rooms (75” displays)

- **Future Investments**
  - Integrated Human Resources and Finance & Accounting systems
  - Internal Audit and Risk Management system
• Current Investments
  ▪ Mobile Device Management (MDM)
  ▪ Identity Access Management (7K client base)
  ▪ Privileged Access Management (system administration)
  ▪ Data Loss Prevention (inadvertent disclosure)

• Future Investments
  ▪ Enhanced Cyber Security Capabilities
  ▪ Disaster Recovery Implementation (backup data center)
  ▪ Selected Core Infrastructure to off-premise (enhanced support, security and functionality not available on premise)
Questions and Answers