



RELIABILITY FIRST

Agenda

Board of Directors • Risk and Compliance Committee

August 21, 2024 • 1:00 PM – 3:00 PM (ET)

Theme: Protecting/Securing the Grid of the Future

Gervasi Vineyard
1700 55th Street NE
Canton, OH 44721

Room: Villa Grande Ballaria Sophia

Attire: Casual

Open Agenda

1. **Call to Order and Appoint Secretary to Record Minutes** 1:00 pm
Presenter: Joanna Burkey, Chair
2. **Antitrust Statement** 1:02 pm
Presenter: Joanna Burkey, Chair
3. **Consent Items**
Presenter: Joanna Burkey, Chair
Reference: a) [Draft Minutes for the May 1, 2024 Risk and Compliance Committee Meeting](#)
b) [Reference Materials – Enforcement Data](#)
Action: Approve Minutes
4. **Keynote Speakers** 1:10 pm
Presenters: Josh Levi, President, Data Center Coalition; and Aaron Tinjum, Director of Energy Policy and Regulatory Affairs, Data Center Coalition
Description: Mr. Levi and Mr. Tinjum will discuss the perspective of the data center industry on its growth, its energy needs and its plans to address them, and opportunities for dialogue/partnership with the electric utility industry.
Reference: a) [Josh Levi – Bio](#)
b) [Aaron Tinjum - Bio](#)
c) [Summary](#)
d) Presentation – will add when available
5. **Physical Security Overview and Update** 1:50 pm
Presenter: Mary Berkley, System Performance Analysis Manager, American Electric Power (AEP)
Description: Ms. Berkley will lead a discussion on AEP's approach to CIP-014-3 and physical security as well as an update on Standards activity in this area.
Reference: Presentation
Action: Information and Discussion
6. **Cyber Security Challenges and Approaches** 2:15 pm

Presenter: Amanda Birker, Manager of TSOC Technologies, and Keith Mehle, Security Operations Analyst V, FirstEnergy
 Description: Ms. Birker and Mr. Mehle will provide a perspective on key challenges FirstEnergy is facing relating to cybersecurity as well as an overview of related controls and focus areas, and suggestions as to what the ERO can do to help entities with these challenges.
 Reference: Presentation
 Action: Information and Discussion

- 7. Next Meeting** 2:30 pm
 • December 4, 2024 • Washington, DC

Closed Agenda

- 8. Confidential Compliance and Enforcement Matters** 2:35 pm
 Presenter: Kristen Senk, Deputy General Counsel and Director, Legal & Enforcement; Tom Scanlon, Managing Enforcement Counsel; and Matt Thomas, Director, Compliance Monitoring
 Description: Ms. Senk, Mr. Scanlon, and Mr. Thomas will present confidential matters.
 Reference: Confidential Documents
 Action: Information and Discussion
- 9. FERC/NERC Oversight Update** 2:45 pm
 Presenter: Matt Thomas, Director, Compliance Monitoring and Kristen Senk, Deputy General Counsel and Director Legal & Enforcement
 Description: Mr. Thomas and Ms. Senk will provide an update on the status and findings of 2024 NERC Oversight activities relating to ReliabilityFirst.
 Reference: a) Summary
 b) 2023 NERC Findings Verification Program: RF
 c) FY2023 FFT/CE Survey Results
 Action: Information and Discussion
- 10. Adjourn**

Roster • Risk and Compliance Committee

Joanna Burkey, **Chair** • Independent (2025)
Patrick Cass, **Vice Chair** • Lead Independent (2025)
Melika Carroll • Independent (2026)
Lesley Evancho • Independent (2025)
Ken Seiler • RTO (2024)
Simon Whitelocke • At-Large (2024)

**a) Draft Minutes for the May 1, 2024 Risk and
Compliance Committee Meeting**



DRAFT - Minutes

Board of Directors • Risk and Compliance Committee

May 1, 2024

ReliabilityFirst Corporation • Cleveland, OH

Open Session

Call to Order – Chair Joanna Burkey called to order a duly noticed open meeting of the Risk and Compliance Committee (Committee) on May 1, 2024, at 1:16 pm (ET). A quorum was present, consisting of the following members of the Committee: Joanna Burkey, Chair; Patrick Cass, Vice Chair; Lesley Evancho; Ken Seiler; and Simon Whitelocke. A list of others present during the Committee meeting is set forth in Attachment A.

Chair Burkey noted this as the first meeting operating under the new Committee name and explained the new structured meeting format to represent a more holistic approach with the themes for the year.

Appoint Secretary to Record Minutes – Chair Burkey designated Niki Schaefer, ReliabilityFirst's (RF) Vice President and General Counsel, as the secretary to record the meeting minutes.

Antitrust Statement – Chair Burkey advised all present that this meeting is subject to, and all attendees must adhere to, RF's Antitrust Compliance Guidelines.

Approve Compliance Committee Meeting Minutes – Chair Burkey presented draft minutes for the December 6, 2023 Committee meeting, which were included with the agenda package. Upon a motion duly made and seconded, the Committee approved the minutes.

Regional Risk Assessment – Johnny Gest, RF's Manager of Engineering and System Performance, presented an overview of the 2024 ReliabilityFirst Regional Risk Assessment, including a description of two high priority risks. He began with a high-level discussion of the report, using performance data and trends to present a summary of the eight risks. Mr. Gest also compared the regional report's alignment with the ERO Risk Assessment. Ms. Sterling confirmed that as a member of the NERC drafting committee, RF is in general alignment with NERC even though there may be slight differences, such as RF's exclusion of Electromagnetic Pulse (EMP) as a risk. Vice Chair Pat Cass asked about the ranking process and in response Mr. Gest explained the process, highlighting the survey of RF and industry subject matter experts.

Mr. Gest presented the change to make the report public, splitting cyber security from physical security and adding risk considerations. He also highlighted Committee input with the subcommittee industry chairs and co-chairs, and the integration of work from the RF Committees (Reliability Committee, Protection Subcommittee and Transmission Performance Subcommittee, Generator Subcommittee). There was a discussion on future work with the Committees.

Then, Mr. Gest covered two high priority risks, Environmental Factors and Changing Resource Mix, in more detail. For Environmental Factors, he shared the recent cold weather events and proposed modifications to the reliability standards. He also talked through Winter Storm Elliot and RF's plant winterization visits. For Changing Resource Mix, he shared the work that RF is doing to follow state policy changes to look at the impact on the grid. He discussed existing and planned resources and trends, including an increase in forced outage rates seen across the footprint and across all fuel types.

Ms. Sterling asked about the status of planned resources at PJM and MISO, and Ken Seiler shared perspective from PJM that whether planned resources are being built depends on load growth and other resources coming off. A discussion followed on the policy driving these changes and how much is renewables-driven. Then Mr. Gest shared the increasing impact of cold weather on resource availability. Simon Whitelocke asked about how these risks compare to two years ago. Mr. Gest explained how misoperations were a big focus previously. There was discussion on the velocity and pace of change, and how to further mitigate the risks.

Ms. Snead raised the recent Environmental Protection Agency (EPA) regulations, noting that some were significant and will impact future resources, retirements and issues with renewables. Mr. Peeler added the technical reasons as to why these regulations are a threat to reliability. Tim Gallagher, RF's President & CEO, commented on NERC's outreach regarding federal policy and regulations.

Mr. Grooms asked for clarification on environmental risks and extreme events. Mr. Gest explained that the risk covers generation during adverse weather and RF has observed increases in outages related to storms, cold or hot weather, and overall generation availability and large storms impacting transmission.

Vice Chair Cass asked whether there was time to work the new regulations into the long-term planning forecasting. Mr. Seiler shared that PJM can see the impact of measurable things. A discussion followed on policy and the domino effect of reliability, and the importance of explaining to organizations the ramification of policies.

Enforcement Update – Mr. Scanlon, RF's Managing Enforcement Counsel, discussed enforcement metrics and trends that are tracked and analyzed on an annual basis. He presented RF's violation intake, noting that RF expects to sustain a high volume of cases. Mr. Scanlon shared that the vast majority of open cases are from moderate or low-risk issues.

He also shared that 88% of all violations are self-reported or self-logged from 2023 and 2024, noting that this is important to ensure RF is not relied on as a control, as these efforts drive continuous improvement. The trend also remains that most of these self-reports are on the CIP side (77%). Mr. Scanlon shared that 29% of the overall ERO violation processing comes from RF. He highlighted the focus on closing older cases while being able to do the discovery early on new cases to ensure the focus is on mitigation and promptly getting risks corrected. Finally, he closed with a reminder on FAC-003 and highlighting the newsletter and a recent “Enforcement Explained” article on many of the operations and planning compliance challenges observed.

Joe Trentacosta asked whether the larger portion of CIP violations were a newer trend or a result of volume. Mr. Scanlon explained it is nuanced, as more opportunity for failure exists with change management and patch management where entities are making hundreds of changes, and healthy programs will have violations.

Brandon Shores Case Study – Michelle Cross, RF’s Manager of External Affairs, presented the Brandon Shores Case Study. She shared the story through the use of a timeline of events and discussed the renewables policies in place in Maryland to provide background information. There was a stakeholder discussion around the pace of retirement and ensuring the project is sustainable in the future, including looking at the support for generation around Peach Bottom. There was discussion on the reliability impacts related to grid transformation. Ms. Cross discussed Maryland’s clean energy goals and the Sierra Club Agreement, and how these expanded the way that RF thinks about state outreach. She noted that Talen’s environmental permit expires at the end of 2025. Ms. Cross then shared RF’s strategy to serve as a technical resource for the states. She highlighted RF’s discussions with stakeholders and recent testimony in Maryland, and legislative meetings at PJM, Talen, and FERC. Ms. Cross highlighted the work RF’s engineering team is performing to evaluate alternative solutions. Rachel Snead questioned the risk that stations retiring earlier than expected pose to the grid. A discussion followed, and several questions were posed for Ken Seiler at PJM, who credited Ms. Cross’s presentation for highlighting the risks and expressed confidence in plans to move forward while acknowledging additional hurdles. He noted that utilities will be expediting updates or looking at other solutions from procurement or replacement resources.

Intro to RF’s Delegation Agreement and Oversight – Mike Hattery, RF’s Senior Counsel of Enforcement, provided an overview of the RF delegation agreement, the scope of delegated authority, and the oversight set forth in the delegation agreement. Mr. Hattery explained the focus on Compliance Monitoring and Enforcement and shared the required and permitted activities. He spoke on the types of NERC oversight of the Regional Entities, including the five-year cadence and FERC participation in this oversight. He shared some of the expected oversight for 2024, including the annual CE/FFT survey, self-logging review follow-up, Align and Secure Evidence Locker (SEL) oversight, review of the registration program, and a certification observation review. Chair Burkey suggested the addition of the presentation to director onboarding.

Next Meeting – Chair Burkey noted that the next Committee meeting will occur on August 21, 2024, in Canton, OH. At 2:46 pm, Chair Burkey moved the Committee into closed session.

Closed Session

Confidential Compliance & Enforcement Matters – Kristen Senk, RF's Deputy General Counsel and Director of Legal & Enforcement, and Matt Thomas, RF's Director of Compliance Monitoring, presented on confidential matters.

Adjourn – Chair Burkey adjourned the Committee meeting at 2:58 pm (ET).

As approved on this 21st day of August, 2024 by
the Compliance Committee,

Niki Schaefer
*Vice President General Counsel & Corporate
Secretary*

Attachment A

Others Present During the Risk and Compliance Committee Meeting

Steve Ambrose • DTE
Jeff Craigo • ReliabilityFirst
Michael DeViscio • PJM
Beth Dowdell • ReliabilityFirst
Chelsey Eppich • ReliabilityFirst
Tim Foster • PJM
Tim Gallagher • ReliabilityFirst, President & CEO
Craig Grooms • Buckeye Power
Scott Hipkins • First Energy
Diane Holder • ReliabilityFirst
Price Marr • MISO
Marcus Noel • ReliabilityFirst
Nelson Peeler • Duke Energy
Niki Schaefer • ReliabilityFirst
Kristen Senk • ReliabilityFirst
Antonio Smyth • ReliabilityFirst
Rachel Snead • Dominion Energy
Jennifer Sterling • Exelon
Brian Thiry • ReliabilityFirst
Matt Thomas • ReliabilityFirst
Jody Tortora • ReliabilityFirst
Joe Trentacosta • SMECO
Jim Uhrin • ReliabilityFirst

b) Reference Materials – Enforcement Data

**RELIABILITY FIRST**

SUMMARY

Enforcement Data

The following slides include enforcement data relating to key metrics ReliabilityFirst tracks relating to potential noncompliance.

The data shows that violation intake remains high through July 2024, and that the overwhelming majority of violations were self-reported as opposed to identified through a compliance monitoring engagement. Regarding violations processed (i.e., filed with NERC) by ReliabilityFirst's enforcement team, most of the violations processed year-to-date were lower-risk violations. The team expects to process in excess of 350 violations by year end. Regarding violations remaining in ReliabilityFirst's inventory, the majority of these violations are considered relatively new, with 65% of those violations identified in 2023 and 2024, 31% identified in 2022, and only 4% identified in 2020 and 2021.

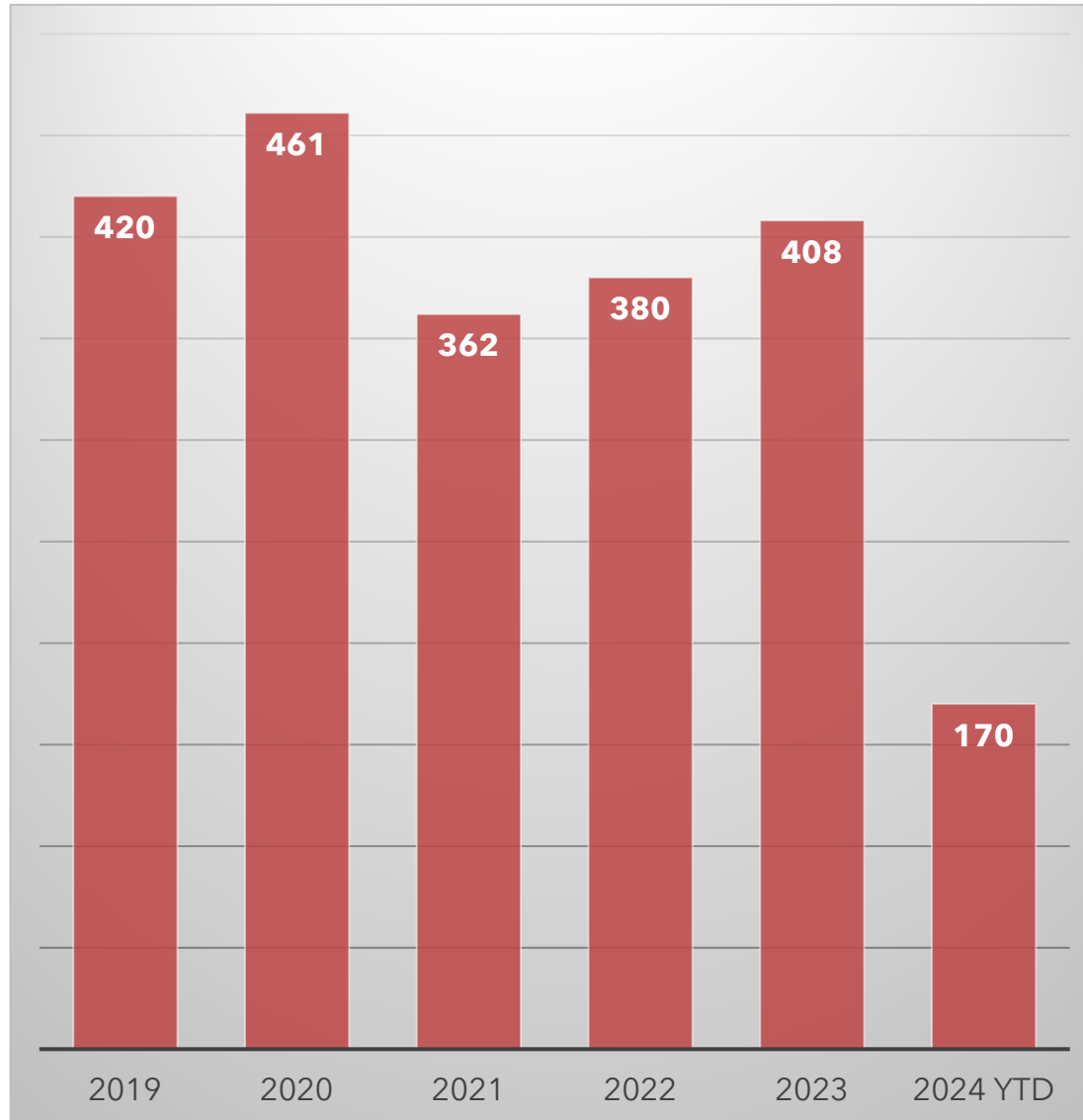
The slides also include information regarding three of the most-violated CIP Standards and Requirements based on 2024 intake (i.e., these cases were reported this year), with examples of the types of conduct at issue.

RF ANNUAL VIOLATION INTAKE



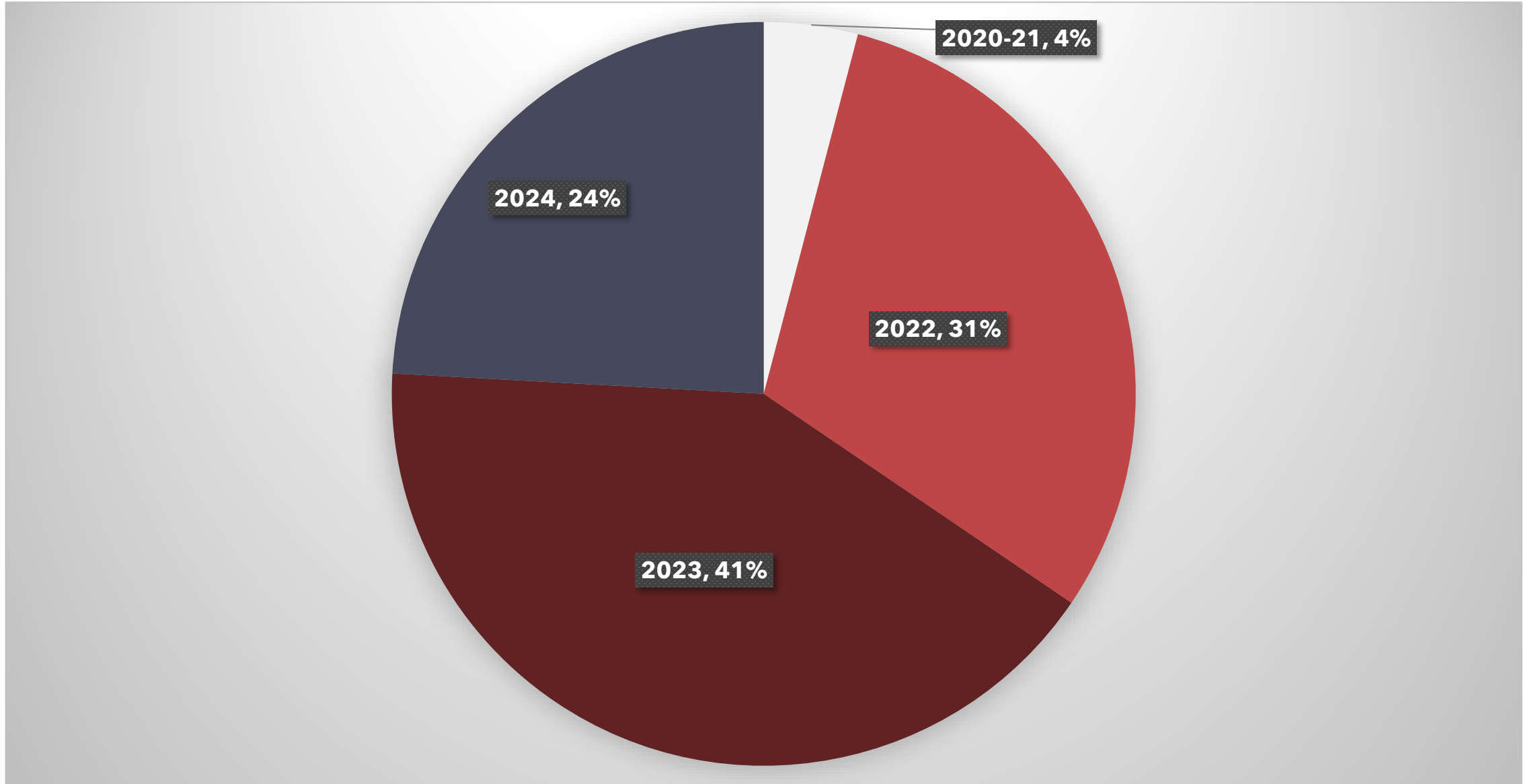
- 2024 YTD (as of 7/24/2024):
 - Majority self-reported/self-logged (96%)
 - Majority CIP (77%)

RF ANNUAL VIOLATIONS PROCESSED



- 2024 YTD (as of 7/24/2024):
 - 91% were processed as Compliance Exceptions or Find, Fix, and Track Reports
 - Majority CIP (75%)

RF INVENTORY BY YEAR REPORTED



CIP COMMENTARY

Standard and Requirement	Summary of Requirement	2024 Intake Volume	Examples of Issues
CIP-010-4 R1	Configuration change management	36	<ul style="list-style-type: none"> • Unauthorized installation of software, applications, or patches • Failing to update baseline configurations post-change • Missing security control verification evidence • Missing firmware identity and integrity evidence
CIP-006-6 R2	Visitor control	26	<ul style="list-style-type: none"> • Construction and maintenance crews (propped doors and piggybacking) • Loss of visual contact • Unescorted visitors • Incomplete/inaccurate logs
CIP-004-7 R4	Access management	12	<ul style="list-style-type: none"> • Unauthorized access grants (e.g., granted without following process) • Inadvertent access (e.g., intended A, provisioned B) • Nested and untracked groups (e.g., unmanaged access to applicable systems discovered)

Josh Levi_Data Center Coalition_Bio_Aug 2024

Josh Levi
President, Data Center Coalition

Josh Levi is president of the Data Center Coalition (DCC), a membership association of leading data center owners and operators serving as the voice of the data center industry. DCC empowers and champions the data center community through public policy advocacy, thought leadership, stakeholder outreach, and community engagement.

DCC is headquartered in Virginia, home to the world's largest data center market, and its members maintain data center infrastructure and investment across the globe. As president, Josh leads the organization and executes all aspects of the DCC's strategy, operations and growth.

Josh is widely recognized for his technology business policy leadership and expertise in key areas across the technology ecosystem. Prior to assuming his current role in July 2019, Josh was vice president for policy at the Northern Virginia Technology Council (NVTC), a nationally-recognized regional trade association, where he spent nearly 20 years supporting Northern Virginia's vibrant technology community. As the policy voice of the organization, he led state, federal and local government relations, policy development and advocacy initiatives. As a member of NVTC's senior leadership team, he provided strategic guidance and counsel related to all facets of the organization's mission, goals and strategy.

Josh initiated the launch and development of NVTC's Data Center and Cloud Committee in 2010 and NVTC's Sustainable Energy Committee in 2018 to help drive growth and advocate on behalf of these two important sectors. Josh also led NVTC's collaboration with Mangum Economics to produce several research reports capturing and highlighting the economic impact of Virginia's data center sector.

Josh has served on numerous policy-related committees and commissions. In 2018, he was appointed by Virginia Governor Ralph Northam to serve as a member of the Virginia Data Sharing and Analytics Advisory Committee, a position to which he was reappointed in 2019.

Josh was awarded a bachelor's degree in political science from Virginia Tech, graduated cum laude from the University of Richmond School of Law, and is a member of the Virginia State Bar.

Aaron Tinjum_Data Center Coalition_Bio_Aug 2024

Aaron Tinjum**Director of Energy Policy and Regulatory Affairs, Data Center Coalition**

Aaron Tinjum is director of energy policy and regulatory affairs for the Data Center Coalition (DCC), the membership association serving as the voice of the data center industry.

Before joining DCC, Aaron spent more than a decade in the utility industry, most recently with Xcel Energy, where he helped advance key policy and regulatory initiatives related to demand side management, grid security, resource planning, and utility-scale clean energy projects.

Prior to Xcel Energy, Aaron served as senior writer for both Direct Energy and Opower. His writing has been cited or featured in several industry and national publications. He has also held fellowships with the Clean Energy Leadership Institute in Washington, D.C. and the University of Minnesota's Humphrey School of Public Affairs.

Aaron received a Bachelor of Arts in Political Science from Carthage College, a Master of Public Affairs from the LBJ School of Public Affairs at The University of Texas at Austin, a Certificate in Financing and Deploying Clean Energy from Yale University, and is a proud alumnus of the Teach For America program.

Data Center Background Material - Summary



RELIABILITY FIRST

SUMMARY

Data Center Background Material

We are excited to have the President of the Data Center Coalition, Josh Levi and the Director of Energy Policy and Regulatory Affairs, Aaron Tinjum, join our Risk and Compliance Committee to share the data center industry's point of view with respect to the electric industry. RF External Affairs Manager, Michelle Cross, compiled some background materials to review before the presentation.

In January of this year, PJM published their "2024 Long Term Load Forecast" which highlights an accelerated load growth in the RF/PJM region over the next fifteen-year planning horizon. Much of the anticipated load growth has been attributed to the increase of data centers in the region. To read more about PJM's load forecast report, and summary, visit PJM's Inside Lines article titled "[PJM Publishes 2024 Long-Term Load Forecast](#)".

Along with the increase of digitization and cryptocurrency that has been a factor for data center load growth in recent years, a key contributor in the future forecasted load growth includes exponential growth to support the artificial intelligence (AI) race as Big Tech companies rush to market on the booming technology. Goldman Sachs research estimates that the [data center power demand will grow by 160% by 2030](#). Big Tech companies, like Amazon, Microsoft and Google, have already reported a [surge in capital spending on AI investments](#).

These large loads need to be carefully studied to ensure system reliability is preserved in the localized area of the data center construction. The Utility Dive article, "[Data Center, AI Load Growth could Threaten Grid Reliability](#)" highlights some of the risks with these large loads. At times, it is possible that data center interconnections may be delayed while system reinforcements are completed to maintain system reliability. These delays can be problematic for those companies that prioritize their speed to market. For this reason and others, we are seeing increased interest in co-locating data center loads with existing generation plants (particularly nuclear plants). This configuration may allow the data center to "cut-the-line", if you will, and circumvent interconnection delays. As noted in the white paper titled "[What Happens When a Nuclear Plant and a Data Center Shack Up?](#)", "the trending towards colocation tells us that it's quicker and easier to build a data campus with inside the fence interconnection facilities to existing generation, than it is to build the new generation and transmission needed to support the data center if it were to interconnect in the more traditional manner."

This issue is especially pertinent to the RF region, as we have already registered our first nuclear power plant and data center co-location involving the Susquehanna nuclear power plant in Pennsylvania with Amazon. FERC is [seeking more information](#) about these amended interconnection service agreements, and is holding a technical conference this Fall to discuss these issues in more detail. We look forward to being part of the conversation, studying the impacts of these co-locations with a focus on reliability and security, and sharing our technical considerations with key stakeholders.

Confidential Board Docs Package