

NERC COMPLIANCE, SIMPLIFIED SigmaFlow Overview

We're a leading provider of cybersecurity and compliance solutions for critical infrastructure protection (CIP) in North America. Our vision is to provide instantaneous detection, alerting, and resolution of cybersecurity and operational anomalies while streamlining critical infrastructure and operational compliance.

The **SigmaFlow Compliance Platform** is a purpose-built, comprehensive compliance evidence collection, management, and reporting solution that solves the challenges of NERC compliance for entities of all sizes.



Key Capabilities And Benefits

SigmaFlow's clients garner major efficiency improvements, a decline in costs, and a reduction in overall compliance risk. This comes from the following three main capabilities:



Process Management

SigmaFlow uses process-driven workflows and closed-loop controls to enforce compliance, streamline work, and build an evidence repository to meet each NERC standard. Clients can utilize our built-in scheduler for recurring tasks and our robust workflow engine to automate complex processes, such as configuration change management.



Audit Readiness

Policy enforcement is an integral part of compliance, and SigmaFlow approaches this by enforcing prerequisites, gathering approvals, and assigning work. The solution collects information from your existing tools, then verifies actual practices against policy. As a final step, the controls automatically produce evidence associated with the appropriate requirements enabling one-click ERTs.



Compliance Oversight

Data-driven evidence reports and customizable dashboards allow for task and issue management and real-time visibility into your compliance program. These reports and dashboards are designed and configurable at the individual and business unit levels as well as the broader organizational level for compliance departments and senior management awareness.

SigmaFlow Beacon

Our baseline management solution is unlike any in the market. The end result is valuable time savings in improving accuracy in meeting the NERC compliance requirements.

The SigmaFlow Difference

The journey to automated NERC compliance is a challenging one, and SigmaFlow is the most powerful platform in the market to help get you there. Our combination of product features and high-value services makes us the logical choice.



Purpose-Built

We're the only system on the market that focuses solely on NERC compliance, allowing us an unprecedented level of optimization for your compliance programs.

Integration

SigmaFlow can work with a variety of tools across your enterprise that are involved in collecting data for compliance.

SigmaFlow Services

To maximize the return on a software investment and accelerate your compliance program, SigmaFlow's world-class services make adoption and usage easier.



Full Implementation Assistance

We'll guide you every step of the way to bring the SigmaFlow platform into production. Starting with predefined workflow definitions, your project manager and implementation team will take you through a structured, phased process that incorporates best practices and allows the platform to seamlessly automate the compliance workflows.



Support Services

Once up and running, our world-class support team is available to assist with issues using the most modern customer service tools and well-defined support processes.



Software Updates And NERC Standard Revisions

In addition to automatic updates to NERC compliance requirements every quarter, we're consistently releasing improvements to our software platform that add features, enhance usability, and fix issues.



KEY SIGMAFLOW WORKFLOWS

Our clients use SigmaFlow to automate a large number of critical compliance workflows. These key workflows include the following:

Evidence Collection: Notifies users responsible for providing NERC evidence, collects the evidence and stores it in the repository with a task, and automatically tags the evidence to the associated NERC standards.

Change Request: Used to document and approve baseline changes to BES cyber assets. A change ticket is generated and is used to collect the necessary evidence about the change. Change tickets are then used for reporting and audit purposes.

Patch Assessment: Documents the recurring process of finding available patches, evaluating them, and prompting the user to launch the patch mitigation or change request process. A patch assessment ticket is generated, and the evidence of what actions/ determinations were made about the patches is collected in the repository.

Mitigation Plan: Creates a mitigation ticket for any patches determined to need mitigation. The system documents the justification, mitigating actions, planned execution date, planned end date, and impacted cyber assets and patches. The workflow tracks the approval from the authorized user for creation and updates to the mitigation plan as well as other supporting evidence for CIP-007 R2.

Baseline Monitoring: Recurring process to compare approved baseline configuration with actual configuration observed on the BES cyber assets and document resolution of discrepancies. A baseline monitoring ticket is generated, and the evidence of what actions/determinations were made about the baseline discrepancies is collected in the repository.

Access Request Workflow: Tracks CIP physical, logical, and information access. The process checks for prerequisites such as PRA and CIP training, collects approvals, assigns provisioning tasks, and generates notifications.

Access Removal Workflow: Tracks access changes such as transfers in which access is removed for a

reason other than termination. The workflow collects which access is to be removed, evidence, and compliance review notes before updating the access in the Personnel Library and sending notifications.

Access Termination: Tracks the access removal process in the event of a termination. The process checks for existing access rights, collects evidence, sends notifications, and updates access records.

Supply Chain: Guides the teams responsible for contracts, risk management, and purchasing through a structured process to evaluate the supply chain risk posed by new contracts and collect evidence supporting the CIP-013 requirements. The system tracks each vendor that has gone through the evaluation process, their purchase orders, and the associated cyber assets.

Project Plan: A highly flexible workflow designed to handle activities with several assignees and timelines. It allows compliance staff to accurately track each stage of projects such as PRC-019 coordination activities and MOD-025/026/027 studies and is backed by a scheduler that will intelligently adjust scheduled studies to account for any ad-hoc actions that affect the schedule. This workflow can also serve to track projects with several smaller activities, or facilities onboarding.

Self-Certification: Based on a user-defined audit period, the workflow identifies the relevant SMEs and launches tasks to collect Reliability Standard Audit Worksheet (RSAW) responses and evidence. The system tracks feedback and approvals within these tasks and provides a certification progress dashboard for executive oversight.

Controls Suite: The Controls Library is linked to the appropriate risks and NERC requirements. The testing workflow allows the controls to be linked to the appropriate NERC standards and requirements. Scheduled controls testing collects evidence that will reside in the SigmaFlow document repository.

NERC COMPLIANCE AT ARIZONA'S LARGEST ELECTRIC UTILITY

Client Vignette

Headquartered in Phoenix, Arizona, **Arizona Public Service (APS)** is Arizona's largest and longest-serving electric utility.

APS's NERC Regulatory Compliance department is responsible for compliance oversight. NERC Regulatory Compliance works collaboratively with the business units to develop the Reliability Standard Audit Worksheet (RSAW) narrative and identify evidence that demonstrates compliance.

APS did not have a central repository that was easy to update with narratives and evidence used for selfcertification or audit preparation. It was difficult to establish a formal process or workflow that could be reliably managed.

APS needed to add functionality to its compliance management process with manageable workflows, easy access for data management, and visibility at the director level and above. To meet these objectives, APS defined the following key requirements for a software solution:

- Annual tasks for narrative and evidence management, identifying requirements specific to each activity owner
- Compliance dashboards for project and management reviews
- Workflow structures to help compliance knowledge transfer
- Audit readiness, including a central repository with up-to-date narratives and evidence and RSAW generation

In addition, APS focused on automating its selfcertification process. Key success factors for this initiative included the following abilities:

- Leveraging a workflow for its NERC processes to assign tasks to the appropriate individuals to upload evidence and narratives
- Assigning tasks to business units with easy-to-use links to evidence and narratives to confirm compliance

- Demonstrating ownership of compliance from leadership down to frontline employees
- Providing a means for the NERC Regulatory Compliance Group to assess how well APS demonstrated compliance and ultimately generate the required RSAWs

APS has successfully implemented our SigmaFlow Compliance Manager across its enterprise for NERC compliance for both CIP and O&P standards.



A FORWARD-THINKING, MIDSIZE POWER COOPERATIVE

Client Vignette

This midwestern utility operates a robust electric transmission structure with more than 3,340 miles of BES transmission line and 250 substations across two states. Its NERC compliance team is passionate about executing their mission to ensure the reliability of our bulk electric system by implementing the NERC Reliability Standards, complying with the reliability standards, and acting as a catalyst for positive change within the organization.

The challenges facing generation and transmission cooperatives, like this Midwest-based utility company, are keeping abreast of evolving and demanding NERC regulations. They were faced with the following:

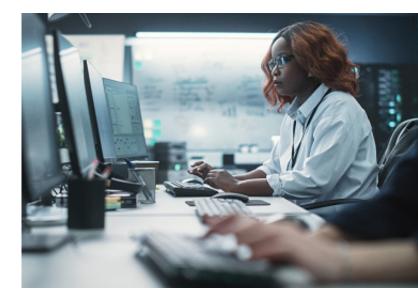
- Managing the ever-growing list of compliance tasks.
- Communicating compliance requirements and changes to various business units.
- Handling all types of compliance activities, including audits, data requests, self-certifications, alerts, and self-identified investigations.
- They felt "trapped" in Excel, struggling to maintain control and data integrity, and ensuring their accuracy, accountability, and enforcement. The utility's compliance team realized that overcoming these challenges and meeting strategic long-range goals required them to look outside the company for the right solution provider.

After an extensive search, SigmaFlow emerged as the best option. SigmaFlow's workflows and internal controls enabled this power cooperative to leverage best practices and get a jumpstart on its implementation. At the end of its implementation phase, this utility was able to deploy a holistic compliance solution that accomplished the following:

- Centralized its document repository with strong controls and oversight
- Dramatically limited the use of company email for evidence and Reliability Standard Audit Worksheet (RSAW) data gathering
- Streamlined the collection of evidentiary information and automated the RSAW generation process
- Migrated away from Excel into an automated solution, resulting in fully auditable, high-quality data stored centrally
- Automated its internal controls and overall compliance programs

Results And Moving Forward

This utility company reduced the number of possible noncompliance events and is now extending the SigmaFlow-based compliance controls to assist with the facilities.



To learn more or request a demo, visit us at: www.parsons.com/sigmaflow or email sigmaflow@parsons.com