RELIABILITY & SECURITY

Oversight Monthly Update

August 15, 2024, 2:00 p.m. MT

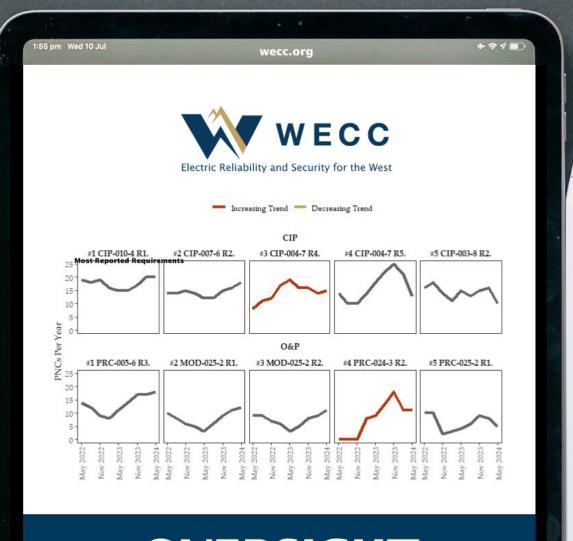


WECC

Reliability & Security Oversight Monthly Update

August 15, 2024

Mailee Cook, Training and Outreach Specialist



-

OVERSIGHT TRENDS UPDATE

Q3 2024

Available now on WECC.org!

FUNDAMENTALS

August 20-21, 2024



Enforcement FUNDAMENTALS

RELIABILITY & SECURITY

October 29-30, 2024

Workshop - Portland, Oregon

Antitrust Policy

- All WECC meetings are conducted in accordance with the WECC Antitrust Policy and the NERC Antitrust Compliance Guidelines
- All participants must comply with the policy and guidelines
- This meeting is public—confidential or proprietary information should not be discussed in open session

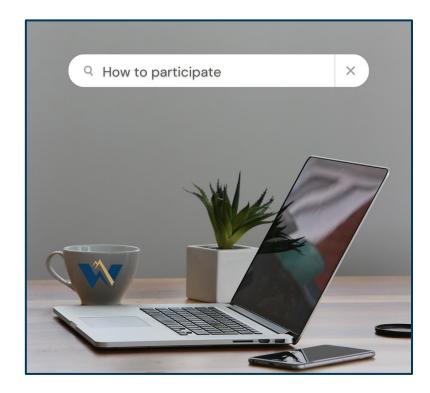


Antitrust Policy

- This webinar is being recorded and will be posted publicly
- By participating, you give your consent for your name, voice, image, and likeness to be included in that recording
- WECC strives to ensure the information presented today is accurate and reflects the views of WECC
- However, all interpretations and positions are subject to change
- If you have any questions, please contact WECC's legal counsel



Participating



Send questions via chat to WECC Meetings Use the "raise hand" feature



Agenda

- Cold Weather
 - Curtis Crews, Senior Technical Advisor, WECC
- Standards Feedback Team
 - Donovan Crane, Senior Engineer, Standards, WECC
- IBR Registration Initiative
 - Abby Fellinger, Senior Registration & Certification Engineer, O&P, WECC
- CIP-010 Change Management Controls
 - Madison Schlosser, CIP Compliance Specialist, El Paso Electric Company
 - Luis Rodriguez, El Paso Electric Company
- Controls Guidance and Compliance Potential Failure Points
 - Molly Elliott, Senior Technical Analyst, Oversight Planning

Cold Weather

August 15, 2024

Curtis Crews Senior Technical Advisor



WECC

Standards Feedback Team

August 15, 2024

Donovan Crane Senior Engineer, Standards



WECC

Ballots/Comments Recently Closed 8-12-2024

- NERC Project 2020-02 Draft 3 PRC-029-1 (Ride-through)
 - Yes vote, with R4 and IP suggestions
- NERC Project 2020-06 Draft 3 IBR Glossary Term
 - Yes vote, we support definition and effort
- NERC Project 2023-02 Draft 3 PRC-030-1
 - Yes vote. Wording clarification requested. Does Noncompliance Cascade?
- NERC Project 2021-04 Draft 4 PRC-028-1
 - Yes vote. Definition ambiguity, IP mapping questions

NERC Project 2020-02 – Draft 3—PRC-029-1 (Ride-through)

- Seeking some clarification / tech writing issues
- Good consistency on term usage
- R4 could be brought out of standard and into implementation plan
- Voted Yes on standard with the suggestions



NERC Project 2020-06 – Draft 3—IBR Glossary Term

- We support the definition.
- We appreciate the effort, will there be examples so that there is no question between Oversight and Entities?
- Voted Yes.



NERC Project 2023-02 – Draft 3—PRC-030-1

- Questions about the word "Implement" in the standard.
- Does R2 Failure lead to auto R3 and R4 Failure?
- Voted Yes with clarification questions.



NERC Project 2021-04 – Draft 4—PRC-028-1

- IBR Unit defined in a footnote only?
 - Will this go in the glossary or only standard-specific?
- "Commercial Operation" is not defined and can be ambiguous in the Standard.
 - Without the defined term it allows different entities to have different definitions.
- Should "ride-through" be capitalized in 1.2 and 1.3?
- If May is the month that must be identified, the IP should not simply say "May 2026," it should say "May 1, 2026."
- Voted Yes with comments and questions for clarification.

Implementation Plan Mapping

- The Standards balloted are potentially tied together and require clarity for when their parts will be implemented
- WECC requested an Implementation map from NERC so that it can be clearly seen how and when each part will be implemented





WECC

IBR Registration Initiative Update

August 15, 2024

Abby Fellinger Senior Registration & Certification Engineer, O&P

IBR Registration Milestones

- On June 27, 2024, FERC issued an <u>order</u> approving the <u>Rules of</u> <u>Procedure</u> revisions, subject to submitting a compliance filing.
- NERC is currently in Phase 2 of the registration milestones identified in the FERC-approved work plan.

Phase 1: May 2023–May 2024	Phase 2: May 2024–May 2025	Phase 3: May 2025–May 2026
 Complete Rules of Procedure revisions and approvals Commence Category 2 GO and GOP candidate outreach and education 	 Complete identification of Category 2 GO and GOP candidates Continue Category 2 GO and GOP 	 Complete registration of Category 2 GO and GOP candidates thereafter subject to applicable NERC Reliability Standards
(e.g., through trade organizations)	candidate outreach and education (e.g., quarterly updates, webinars, workshops, etc.)	 Conduct specific Category 2 GO and GOP outreach and education (e.g., quarterly updates, webinars, workshops, etc.)



IBR REGISTRATION INITIATIVE REQUEST For Information

- On July 9, 2024, NERC issued a Request for Information (RFI) to registered Transmission Owners and Balancing Authorities to identify entities that meet the registration criteria contained in the FERC-approved revisions to the Rules of Procedure.
 - Information provided will be used to contact IBR candidates for purposes of education on <u>NERC</u> and the <u>E-ISAC</u>, registration, Reliability Standards, etc.



Request for Information (Cont.)

Attention Transmission Owners and Balancing Authorities

- RFI Responses are due to your applicable Regional Entity (<u>registration@wecc.org</u>) by September 20, 2024.
 - Fill out each field in the RFI spreadsheet, which may include contact information for Category 2 entities or Not Applicable (N/A). If this request is Not Applicable, please include the following confirmation notification in the Notes section of the RFI spreadsheet:

"Our entity does not have any non-BES IBRs meeting the criteria that are either (1) owned by our organization or (2) resources connected to our system that are owned by other entities. This submission addresses resources currently in-service and those expected to be in-service by May 2026."





Reques	equest for Information (RFI) – Identification of Owners and Operators of non-BES Inverter-Based Resources (IBRs)											
	DISCLOSUR	E (Once data	a has been e	ntered and	submitted)							
Registered Entity Name:												
Registered Entity NCR ID:	TINCR55555											
Completed Date:	Completed Date: 8/15/2024											
Region MRO, NPCC, RF, SERC, Texas RE, WECC (Select from drop- down box)	State where Facility Resides (Select from drop-down box)	Plant Name/Designation	EIA Plant Name	EIA Plant Code	Fuel Type IBR Type (Select from drop-down box)	Hybrid Resource Facility (Select Yes/No)? (Select from drop-down box)	Gross Nameplate Rating (MVA)	Identify Voltage at Point of Interconnection (kV)	Interconnection Facility (Substation) Name	Non-BES IBR Owner Name		
WECC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		

Non-BES IBR Owner	Non-BES IBR Owner	Non-BES IBR Owner	Non-BES IBR Owner	Non-BES IBR Operator	Additional Information				
Corporate Address	Contact Name	Contact Phone Number	Contact Email Address	Name	Corporate Address	Contact Name	Contact Phone Number	Contact Email Address	
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		"Our entity does not have any non-BES IBRs meeting the criteria that are either (1) owned by our organization or (2) resources connected to our system that are owned by other entities. This submission addresses resources currently in-service and those expected to be in-service by May 2026."

RFI contains five tabs ->

IBR Communications Efforts

- Current communications products:
 - Strategic Communications Plan
 - Quick Reference Guides
 - <u>FAQs</u>
 - Fact Sheets
 - Quarterly Updates
 - WECC IBR website posts



NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

Phase 1: May 2023-May 2024

Commence Category 2 GO and GOP

candidate outreach and education

e.g., through trade organizations)

LEARN MORE ABOUT NERC AND THE E-ISAC X in

Complete Rules of Procedure

revisions and approvals



As part of its *Inverter-Based Resource Strategy*, NERC is dedicated to identifying and addressing challenges associated with inverter-based resources (IBR) as the penetration of these resources continues to increase. ERO Enterprise assessments identified a reliability gap associated with the increasing integration of IBRs as part of the grid in which a significant level of bulk power system-connected IBR owners and operators are not yet required to register with NERC or adhere to its Reliability Standards.

In response, FERC issued an <u>order</u> in 2022 directing NERC to identify and register owners and operators of currently unregistered bulk power system-connected IBRs. Working closely with industry and stakeholders, NERC is executing a FERC-approved work plan to achieve the identification and registration directive by 2026. Resources are also posted on the <u>Registration page</u> of the NERC website.

IBR Registration Milestones

Phase 2: May 2024–May 2025

Complete identification of Category

Continue Category 2 GO and GOP

candidate outreach and education

(e.g., quarterly updates, webinars,

2 GO and GOP candidate

rkshops, etc.)

Phase 3: May 2025-May 2026

Complete registration of Category 2 GO and GOP candidates thereafter

Conduct specific Category 2 GO

and GOP outreach and education

(e.g., quarterly updates, webinars,

E-ISAC

subject to applicable NERC

Reliability Standards

rkshoos, etc.)

NERC

Key Activities rd of Trustees approve

- NERC's Board of Trustees approved proposed Rules of Procedure revisions on February 22 and filed them with FERC on March 19.
- FERC issued an <u>order</u> approving the Rules of Procedure revisions, subject to submitting a compliance filing, on June 27.
- NERC published its <u>Q2 2024 Quarterly Update</u> on July 11.
- Mill NERC submitted its <u>quarterly work plan</u> <u>update</u> to FERC on August 9.

Available Resources

- NERC Registration Page
- <u>Standards Under Development Page</u> | FERC Order <u>No. 901 Milestone 2 Summary</u>
- Q1 2024 Update | Q2 2024 Update
- IBR Webinar Series and FAQs
- Quick Reference Guide: Candidate for Registration
- Quick Reference Guide: Inverter-Based Resource
 <u>Activities</u>
- Learn about NERC and Join the E-ISAC

RELIABILITY | RESILIENCE | SECURITY

WECC

CIP-010 Change Management Controls

August 15, 2024

Madison Schlosser, CIP Compliance Specialist, El Paso Electric Company





CIP-010 Change Management Controls

Agenda

- Introduction
 - Background on EPE
 - Internal Compliance Program at EPE
 - > ICDCT
 - Control Objectives 1, 2, & 3
- CIP-010 Change Management Controls at EMSS
 - Workflow



Introduction

El Paso Electric Company

- Functional Registrations: BA, DP, GO, GOP, PA/PC, RP, TO, TOP, TP, TSP
- Subject to Regional Entity(s): WECC
- Generation Capability: Local Gen 1,458 MW; 4 Plants- 3 West Texas and 1 Plant-New Mexico (includes 12.24 MW renewable resources)-Remote Gen-633 MW from Palo Verde
- Peak Load: 2316 (Year 2024)
- Miles of BES Transmission: Approx. 1,180 miles of 345 kV and 517 miles of 115 kV
- Control Center: 2
- Approximate Electric Customers Served: 460,000



Introduction

- Internal Compliance Program (ICP)
 - ICP-001 Program Management
 - ICP-002 Preventive control
 - ICP-003 Detective control
 - ICP-004 Corrective control
 - ICP-005 Training
 - ICP-006 Internal auditing + Audit Prep
 - ICP-007 Industry watch and communications
- ICDCT



Control Objectives



Ensure that all changes follow the proper change management process, which includes proper testing, review, approval, and documentation of updated baselines. Ensure that changes do not adversely impact CIP-005 and CIP-007-related controls. Ensure that software source and integrity are verified prior to any changes.



CIP-010 Change Management Controls at EMSS

- Workflow via ITSM (IT Service Management)
- Separation of duties:
 - **Requesting Engineer** Submits Change Request (CR) & Evidence
 - Cyber Security (CS) Team Reviews CR & Evidence
 - Change Approval Board (Management) Approves CR & Evidence

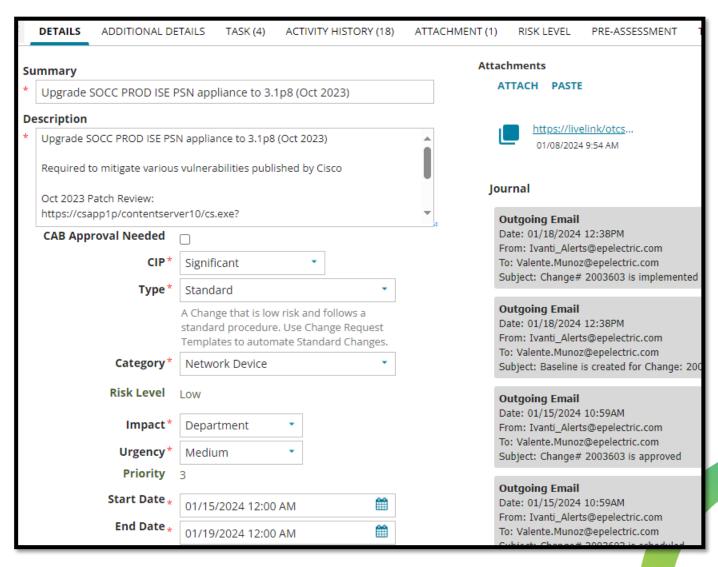




Step 1: Details 1

Requesting Engineer populates

- Summary General description with date (Upgrade, onboarding, etc.)
- Description Include links to evidence
- CIP Non-CIP, Significant, Trackable
- Type Standard, Minor, Significant, Major, Emergency
- Category Type of System
- Risk Level Automated from Risk Level tab
- Impact Individual, Department, Company/VIP
- **Urgency** Low, Medium, High
- Priority Automated from urgency
 - Start Date Expected start date of change
 - End Date Expected completion date of change





Step 2: Additional Details

Requesting Engineer populates

- Technical Analysis
- Backout Plan
- Test/Verify Plan Testing plan in QA
- **Test/Verify Results** QA Testing Results & evidence
- Acceptance Criteria

CETAILS ADDI	TIONAL DETAILS	TASK (4)	ACTIVITY HISTORY (18)	ATTACHMENT (1)	RISK
Technical Analysis			2SN appliance to 3.1p8 (Oc		Î
	Oct 2023 Pat	ch Review:	us vulnerabilities publisher erver10/cs.exe?	d by Cisco	•
Backout Plan	* Roll back up	lates			
Test/Verify Plan	2. Upload pa 3. Install pate 4. Validate th 5. Test ISE fu	tch package t ch package ar e appliance c	omes back online successf ACACS, RADIUS)	ully	
Test/Verify Results	Evidence: https://livelin	k/otcs/cs.exe	P testing and confirmation ? &objAction=browse&viewT		
Acceptance Criteri	a* Verify no une	expected char	nges to baselines		4



Step 3: Risk Level

Requesting Engineer populates

D	DETAILS	ADDITIONAL DETAILS	TASK (4)	ACTIVITY HISTORY (18)	ATTACHMENT (1)	RISK LEVEL
				Risk level: Low (25 of 100)		
0	Q1. Missio	n or Business Critical?				
		○ Select Answer				
		No				
		⊖ Yes				
(Q2. Fast Tr	ack?				
		◯ Select Answer				
		No				
		⊖ Yes				
0	Q3. Not du	iring normal maintenance	e window?			
		O Select Answer				
		No				
		⊖ Yes				
0	Q4. Requir	es service outage?				
		O Select Answer				
		No				
		⊖ Yes				



Step 4: Pre-Assessment 2 🗸 3 🗸

Requesting Engineer populates & signs

<	DETAILS	ADDITIONAL DETAIL	LS	TASK (4)	A	CTIVITY HISTORY (18)	A	TTACHMENT (1)	RISK LEVEL	PRE-ASSESSMENT
N	Might the ch	ange impact any o	of t	he following	g:					
E	SP Changes		*	No	•					
E	AP Changes	5	*	No	•					
E	BES Cyber As	ssets	*	No	•					
E	AP Access P	ermissions	*	No	•					
C	Dial-up Auth	entication	*	No	•					
F	Routing Cha	nges	*	No	•					
4	ACLs		* [No	•					
F	Ports and Se	rvices Changed	* [No	•					
S	Software Ins	tall/Upgrade	*	Yes	•					
¢	OS Version		* [Yes	•					
S	Security Pat	ch Installation	* [Yes	•					
N	Malicious Co	de Detection	*	No	•					
S	Security Eve	nt Monitoring	*	No	•					
S	System Acce	SS	*	No	•					
E	MS-CIP-005	-5-R1-ESP Drawing	*	No	•					

Pre-Assessment Comments	 Create backup of current running configuration 	
	2. Upload patch package to ISE appliance	
	3. Install patch package and reboot	
	4. Validate the appliance comes back online successfully	
	5. Test ISE functionality (TACACS, RADIUS)	
	6. Back up new running configuration	-

- Verify impact (includes CIP-005 and CIP-007 controls)
- Provide evidence of:
 - Current state of the device or software to be changed
 - Software source and integrity verification evidence
 - > Any other evidence as applicable.
- Once signed and completed, CR moves to "Requested" and a task is created for CS Team to review

35332	Fill out Pre-Assessment form and complete task	Completed	EMS	Valente Munoz	01/08/2024 9:52 AM	01/08/2024 9:52 AM
35333	Review the Pre-Assessment form	Completed	EMS	Andrew Hubbard	01/08/2024 9:52 AM	01/08/2024 11:38 AM





Cyber Security Team reviews and signs

- Verify successful confirmation of testing in QA environment
- Once reviewed and signed, CR status moves to "Pending Approval"

Pre-Assessment Comments	 Create backup of current running configuration Upload patch package to ISE appliance Install patch package and reboot Validate the appliance comes back online successfully Test ISE functionality (TACACS, RADIUS) Back up new running configuration 	Ĵ
Performed By: Va	lente Munoz on 01/08/2024 9:55 AM	
Reviewed By: Ar	drew Hubbard on 01/15/2024 10:30 AM	

Change Approval Board approves

- Change Approval Board notified via email and task is created
- 1 approval is required
- Once change is approved, CR status moves to "Scheduled"
 Engineer(s) can proceed with the change

<	DETAILS	ADDITIONAL DETAILS	TASK (4)	ACTIVITY HISTORY (17)	ATTACHMENT (1)	RISK LEVEL	PRE-ASSESSMENT	TEST PROCEDURE	APPROVALS (1)	APPROVAL VOTE TRACKING (3)	IN
-)	Go to										
	Name			Status	Parent Category	Update	d By U	pdated On	Created On	Approval Vote Details	
	OT Manage	r Approval for Change #2	003602	Approved	Change	Internal	Services 01	/08/2024 3:31 PM	01/08/2024 11:38 AM	M Approved by German Escob	oedo



Step 5: Test Procedure $2\sqrt{3}\sqrt{3}$

Requesting Engineer populates and signs

C DETAILS ADDITIONAL DETAILS TASK (4) ACTIVITY HISTORY (18) ATTACHMENT (1)	RISK LEVEL	PRE-ASSESSMENT	TEST PROCEDURE
Completed ESP Changes	N/A 🔹			
Completed EAP Changes	N/A 🝷			
Updated BES Cyber Assets and PCA Lists	N/A 🝷			
Verified EAP Access Permissions	N/A 🝷			
Verified Dial-up Authentication	N/A 🝷			
Verified Routing Changes	N/A 🝷			
Verified Impact on ACLs	N/A 🝷			
Verified Ports and Services are Enabled	Yes 🔹			
Verified Software Versions	Yes 🔹			
Verified OS Version	Yes 🔹			
Verified Security Patch Installation	Yes 🔹			
Verified Malicious Code Detection is Running	N/A 🝷			
Verified Security Event Monitoring and Reviewed Abnormalities	Yes 🔹			
Verified System Access Had Not Been Altered	Yes 🔹			
Updated EMS-CIP-005-5-R1-ESP Drawing	N/A 🔹			
Documented Differences Between Test and Production	Yes 🔹			
(Also inlude a description of the measures used to account for any differences)				

Test Procedure Comments	 Create backup of current running configuration Upload patch package to ISE appliance Install patch package and reboot Validate the appliance comes back online successfully Test ISE functionality (TACACS, RADIUS) Back up new running configuration 	Î
Performed By: Valente Munoz on 01/15/2024 9:16 AM		

- CR status is moved to "Implemented"
- Verify and document impact to CIP-005 and CIP-007 controls
- Provide evidence of:
 - System state post-change
 - Confirmation of successful system validation
 - Any other evidence as applicable
- Once signed and completed, a task is created for CS Team to review to verify evidence and update baselines as applicable

35473	Review the 'Test Procedure' form	Completed	EMS	Yolanda Benavides	01/15/2024 9:17 AM	05/20/2024 1:29 PM
35472	Fill out the 'Test Procedure' form	Completed	EMS	Valente Munoz	01/15/2024 9:15 AM	01/15/2024 9:17 AM





Cyber Security Team reviews and signs

est Procedure Comme		 Create backup of current running configuration Upload patch package to ISE appliance Install patch package and reboot Validate the appliance comes back online successfully Test ISE functionality (TACACS, RADIUS) Back up new running configuration
Performed By:	Valente Munoz on 01/15/2024 9:16 AM	
Reviewed By:	Yolanda Benavides on 02/14/2024 4:09 PM	n

Once reviewed and signed, CR status is moved to "Closed"

Change control process is complete



Questions

WECC

Controls Guidance and Compliance Potential Failure Points

August 15, 2024

Molly Elliott Senior Technical Analyst, Oversight Planning

Controls Guidance and Compliance Potential Failure Points

- For WECC entities
- Starting point in assessing risk and designing appropriate internal controls
- Examples of control activities based on good practices



Controls Guidance and Compliance Potential Failure Points

- 19 Documents
- CIP-010-4 is on the way

Internal Controls Guidance And Compliance Failure Points								
File Type	Title	Modified						
PDF	CIP-003-8 Controls Guidance and Compliance Failure Points	2024-07-09						
PDF	CIP-005-7 Controls Guidance and Compliance Failure Points	2024-07-09						
PDF	CIP-008-6 Controls Guidance and Compliance Failure Points	2024-07-09						
PDF	CIP-012-1 Controls Guidance and Compliance Failure Points	2024-07-09						
PDF	CIP-013-2 Controls Guidance and Compliance Failure Points	2024-07-09						
PDF	CIP-014-3 Controls Guidance and Compliance Failure Points	2024-07-09						
PDF	COM-001-3 Controls Guidance and Compliance Failure Points	2024-07-09						
PDF	EOP-004-4 Controls Guidance and Compliance Failure Points	2024-07-09						
PDF	EOP-011-2 R1 - R6 Controls Guidance and Compliance Failure Points	2024-07-09						
PDF	EOP-011-2 R7, R8 Controls Guidance and Compliance Failure Points	2024-07-09						
PDF	FAC-001-4 Controls Guidance and Compliance Failure Points	2024-07-09						
PDF	FAC-008-5 Controls Guidance and Compliance Failure Points	2024-07-09						
PDF	FAC-014-3 Controls Guidance and Compliance Failure Points	2024-08-09						
PDF	MOD 032-1 Controls Guidance and Compliance Failure Points	2024-07-09						
PDF	MOD-033-2 Controls Guidance and Compliance Failure Points	2024-07-09						
PDF	PRC-005-6 Controls Guidance and Compliance Failure Points	2024-07-09						
PDF	PRC-024-3 Controls Guidance and Compliance Failure Points	2024-07-09						
PDF	PRC-027-1 Controls Guidance and Compliance Failure Points	2024-07-09						
PDF	TPL-001-5.1 Controls Guidance and Compliance Failure Points	2024-07-09						

Controls Guidance and Compliance Potential Failure Points

- New website: Slightly new look
 - Program Areas > Compliance > United States
- Refresh your links
- <u>https://www.wecc.org/program-areas/compliance/compliance-united-states</u>

Compliance - United States

Welcome to the WECC Compliance page for the United States, providing the latest guidance, documents, processes, contact information and frequently asked questions relating to WECC Compliance activities. WECC encourages Registered Entities to book-mark and frequently check this page for up-to-date information regarding WECC Compliance.

The North American Electrical Reliability Corporation (NERC) and WECC use the Compliance Monitoring and Enforcement Program (NERC CMEP) and the WECC Compliance Monitoring and Enforcement Program Implementation Plan (WECC CMEP IP) to monitor, assess and enforce compliance with Reliability Standards within the United States.

Audits	~
Best Practices	~
Compliance Hotline - Complaints	~
Compliance Monitoring And Enforcement Program	~
Contacts	~
Enforcement	~
Inherent Risk Assessment and Compliance Oversight Plan Survey	~
Internal Controls Guidance And Compliance Failure Points	~
Internal Controls Failure Points	~
Internal Controls Information And Tools	~



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RELIABILITY & SECURITY

Oversight Monthly Update

September 19, 2024, 2:00 p.m. MT



Follow and engage! @weccreliability

