Initial Engagement Submissions

William Braun
Senior Compliance Analyst

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Upcoming ERO Events

June - July 13, 2023

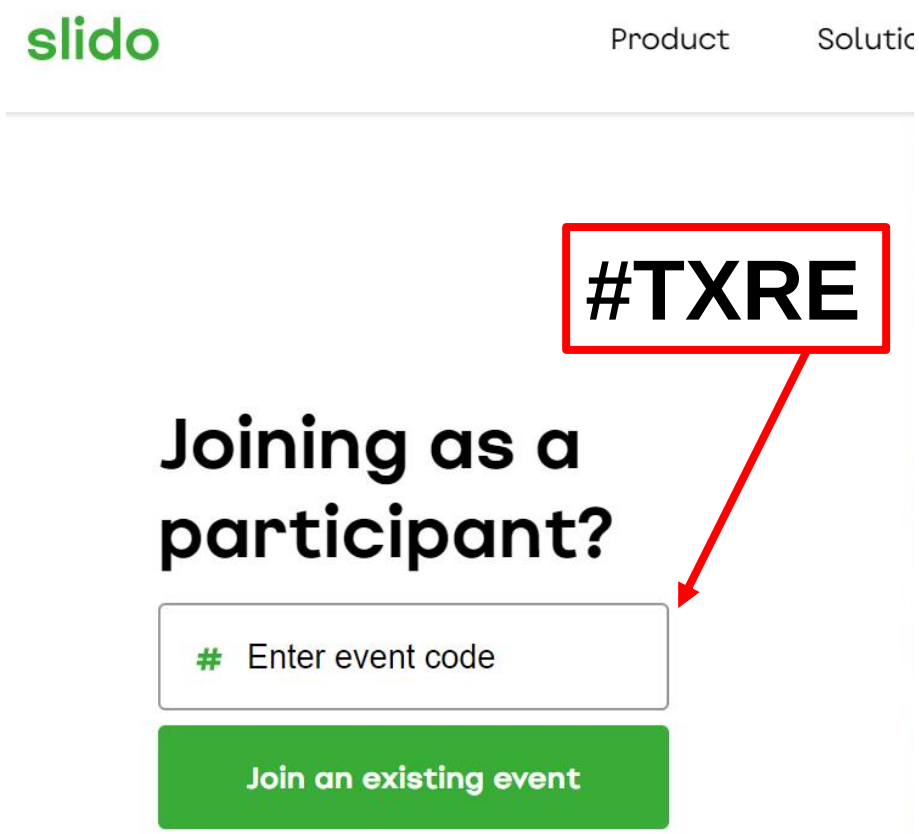
Inverter-Based Resource Webinar Series

June 29, 2023

Regional Summer Assessment Webinar

July 17, 2023

Technical Talk with RF



Slido Question #1
How many NERC compliance engagements have you participated in?

Agenda

- Value of the Initial Submission
- Engagement Timeline
- Initial Submission Expectations
- Example Submission

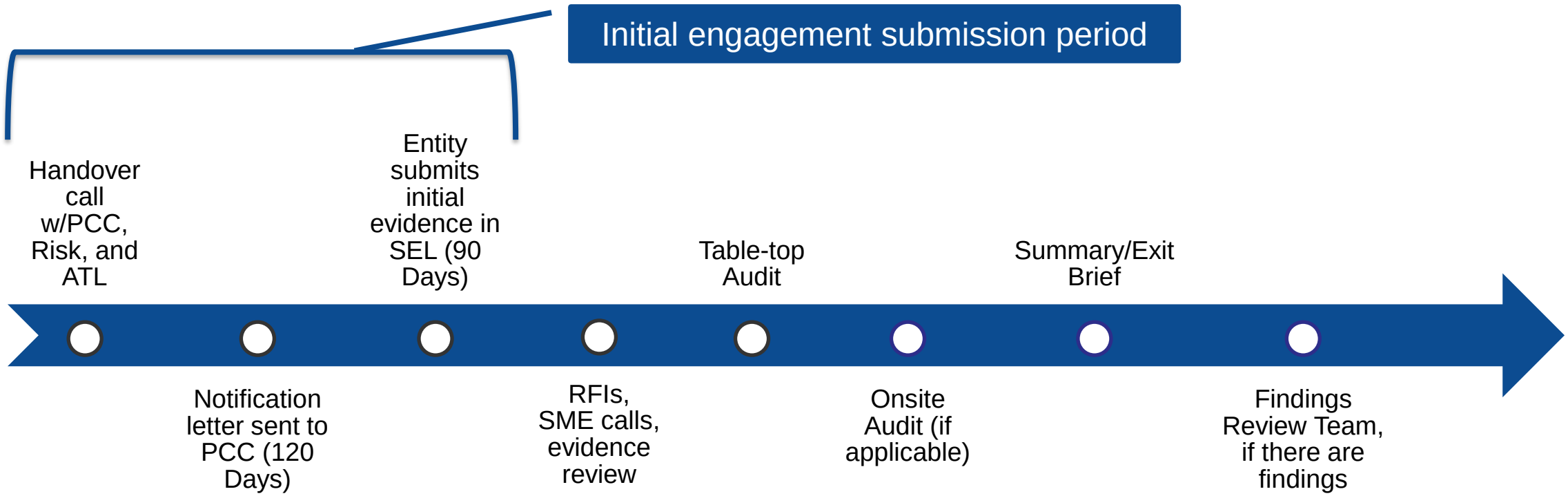
Initial Engagement Submissions

Shows how thorough and organized the entity is and how the entity understand its compliance obligations.

Provides first opportunity to tell the compliance story for each Standard and Requirement in the engagement scope.

Thorough evidence provided typically results in fewer additional questions.

Audit Process Overview



Initial Engagement Submissions

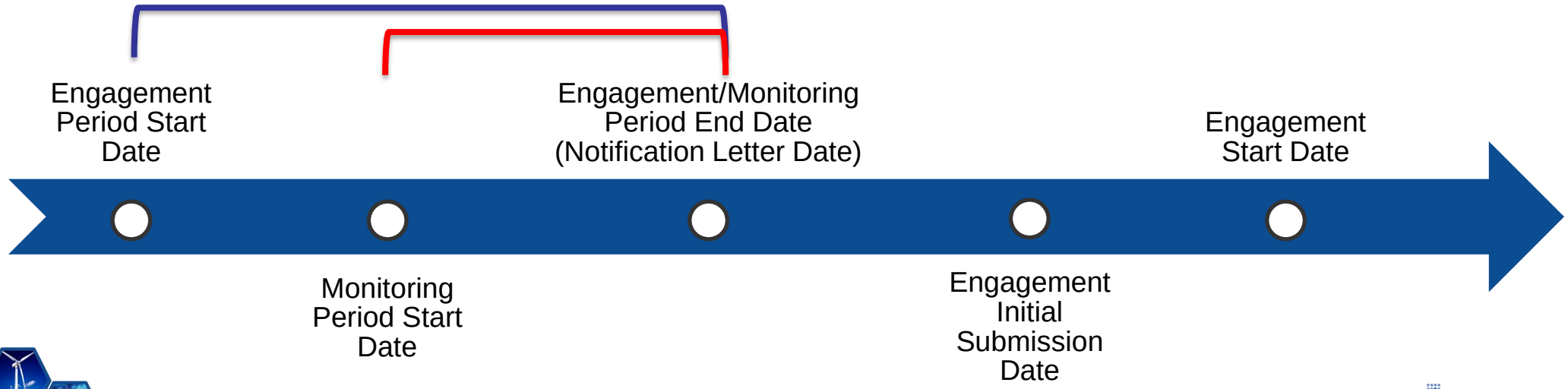
Audit Notification Package

- Texas RE generally sends the Audit Notification package via Align to entities 120 days prior to the scheduled start date of the audit
  - In some cases, the entity won't see details of the engagement until the "visibility date" is reached
- Align sends a notification to the entity's Primary Compliance Contact (PCC)
- PCC should review the notification and contact the Audit Team Lead (ATL) with any questions or concerns.
- All evidence will be submitted in the SEL
- Auditor may send documents (e.g., sampling) and essential communication through Align.

Initial Engagement Submissions

The engagement notification letter will identify a compliance monitoring period and an engagement period.

- **Engagement period:** The time period for which the compliance evaluation may extend to if necessary.
- **Monitoring period:** The time period the entity should address in the initial submission and will generally be the focus of the engagement team's compliance evaluation. *Note: When Align is fully implemented there will only be a "Compliance Monitoring Period" provided within the GUI*.



Initial Engagement Submissions

Initial Submissions Include:

- Align uses a workpaper module in which entities will provide a compliance narrative similar to an RSAW
- Texas RE data request forms (PRC-005 spreadsheet, CIP V6 Evidence Request Spreadsheet)
  - If an entity would like to provide data in a format other than the format requested in Texas RE data request forms, coordinate with the audit team lead to determine if desired format is sufficient for the audit team to evaluate compliance
- Associated evidence
  - Example: Documentation showing the population, examples
- Various other documents provided in notification documentation

Note: Do Not Submit Zip Files or Adobe Flash Files

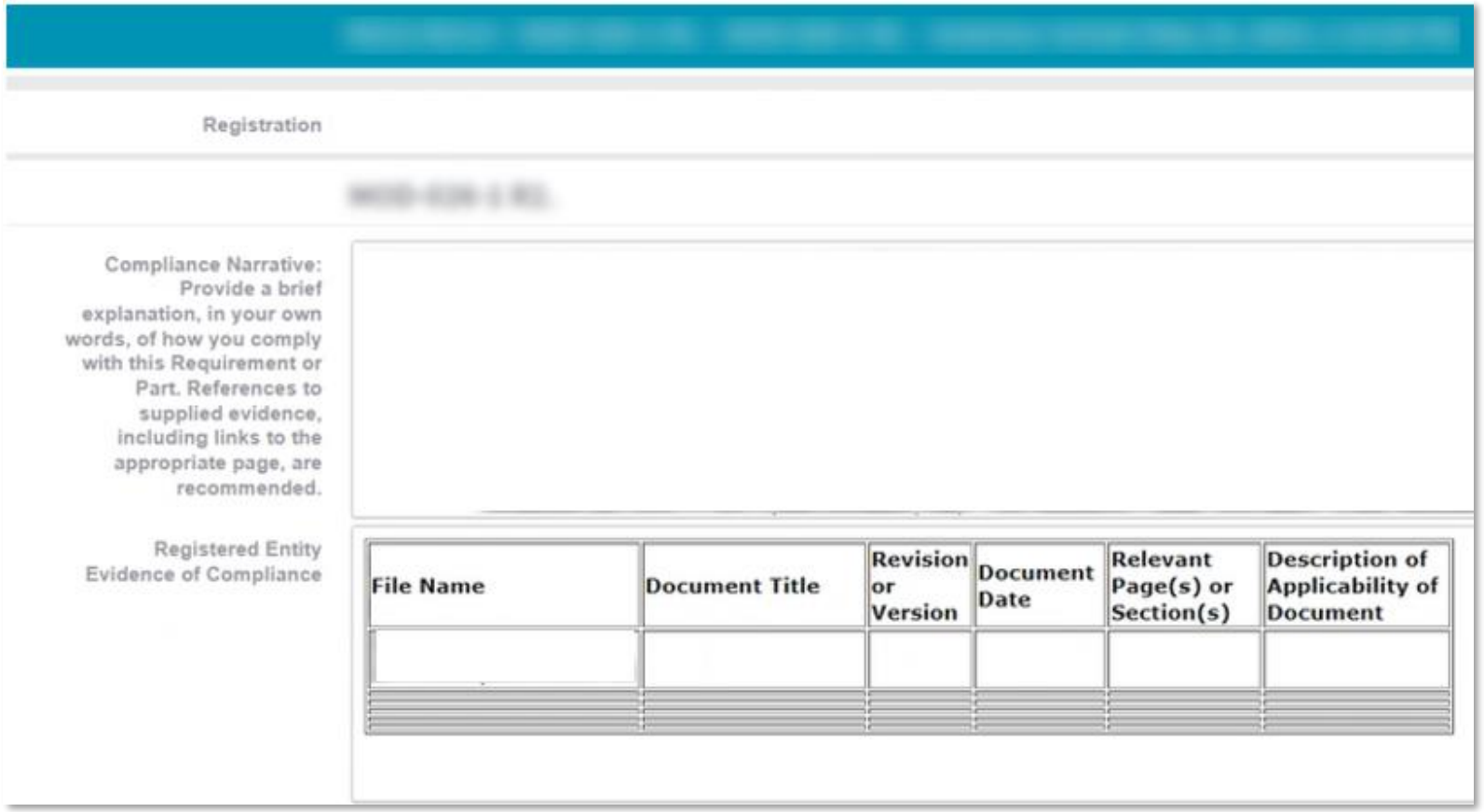
The Secure Evidence Locker (SEL) is Being Used

Engagement Compliance Narrative

Initial Questions

Compliance/Internal Controls Narrative

Entity Evidence of Compliance
(i.e., the list of evidence referenced in the narrative and provided in the initial submission)



Registration

Compliance Narrative: Provide a brief explanation, in your own words, of how you comply with this Requirement or Part. References to supplied evidence, including links to the appropriate page, are recommended.

Registered Entity Evidence of Compliance

File Name	Document Title	Revision or Version	Document Date	Relevant Page(s) or Section(s)	Description of Applicability of Document

RSAW Reference and Example (PRC-024)

Questions and Narrative (Include Internal Controls!)

Registered Entity Response (Required):

Question: Does your entity own any generator frequency protective relaying activated to trip its applicable generating unit(s) in accordance with Requirement R1? ☐ Yes ☐ No

If yes, provide a summary of the generator frequency protective relaying in the box below, and proceed to the Registered Entity Response section below.

[Note: A separate spreadsheet or other document may be used. If so, provide the document reference below.]

For some Standards it may be helpful to explain how the entity determined it does not have any instances applicable to the requirement.

Registered Entity Response (Required):

Compliance Narrative:

Provide a brief explanation, in your own words, of how you comply with this Requirement. References to supplied evidence, including links to the appropriate page, are recommended.

Slido Question

Does your entity maintain compliance narratives or are compliance narratives written only when your organization knows the scope of the engagement?

RSAW Reference and Example

Evidence Requested and Registered Entity Evidence

Population

Sampling

Evidence Requested[i]:

Provide the following evidence, or other evidence to demonstrate compliance.
A list of all generator frequency protective relays that activate to trip applicable generating unit(s), including the dates the frequency protective relays were verified in compliance or set in accordance with Requirement R1 that show the entity is meeting the Implementation Plan.
A list of generator frequency protective relays that have exceptions, as listed in Requirement R1, including the reason for each exception.
For all, or a sample of generator frequency protective relays selected by the auditor, dated setting sheets, calibration sheets or other documentation that demonstrate that frequency protective relay settings were set such that the generator frequency protective relaying does not trip the applicable generating unit(s) within the "no trip zone" of PRC-024 Attachment 1.

Could be one summary document

Registered Entity Evidence (Required):

The following information is requested for each document submitted as evidence. Also, evidence submitted should be highlighted and bookmarked, as appropriate, to identify the exact location where evidence of compliance may be found.					
File Name	Document Title	Revision or Version	Document Date	Relevant Page(s) or Section(s)	Description of Applicability of Document

Compliance Assessment Approach

Compliance Assessment Approach Specific to PRC-024-2, R1
This section to be completed by the Compliance Enforcement Authority

	Select all, or a sample thereof, applicable generator frequency protective relays, and verify the relays are set to prevent the applicable generating units from tripping within the "no trip zone" of PRC-024-2 Attachment 1 (unless one of three specified exceptions applies).
	Verify the entity's applicable generator frequency protective relay settings meet the timelines of the Implementation Plan.
Notes to Auditor: Reference footnote 1 (of the Standard, footnote 3 in the RSAW) which states: "Each Generator Owner is not required to have frequency or voltage protective relaying…" Reference footnote 2 (of the Standard, footnote 4 in the RSAW) which states: "… this requirement applies to frequency protective relays applied on the individual generating unit of the dispersed power producing resources, as well as frequency protective relays applied on equipment from the individual generating unit of the dispersed power producing resource up to the point of interconnection." Applicable generator frequency protective relays must be set to meet high and low frequency limits, and frequency duration limits per PRC-024 Attachment 1. Furthermore, the auditor needs to ensure the compliance assessment is performed with the appropriate Interconnection curve.	

Align is Utilized for Self-Certifications

Certification Declaration by Entity

- Provide a brief explanation, in your own words, of how you responded (e.g., Compliant/Noncompliant) regarding a Requirement
- Provide a brief explanation of any internal controls that you utilize to facilitate compliance with a Requirement
- References to supplied evidence, including links to the appropriate pages, are recommended

Limited Requests for Additional Information

- Align contains questions to obtain specific information

Focus on Identified Risks

- Risk group may direct team to focus on subset of population
- Self-Certifications do not reset Compliance Obligation Period

Examples of Self-Certification Questions for PRC-004-6 R1

QUESTION PREVIEW
Explain how the facility tracks the status of BES interrupting device operation analysis to ensure an identification of whether its Protection System components caused a Misoperation occurs within 120 days of the BES interrupting device operation.
Explain how the personnel responsible for analysis of BES interrupting device operations are notified when a BES interrupting device operation occurs. Does the facility have automated notifications in place to ensure appropriate personnel are notified when a BES interrupting device operation occurs?
Provide evidence of analysis performed for each BES interrupting device operation and evidence that the facility identified whether its Protection System components caused a Misoperation within 120 days of each BES interrupting device operation.
Provide a list of all BES interrupting device operations that have occurred during the monitoring period and explain how the facility identified these BES interrupting device operations.

Initial Submission Guidance

Process

Population

Implementation

Process

Explain completion of task
(include Internal Controls!)

Provide and reference documented processes

Identify systems and tools used

Process Example – PRC-024-2

Entity explained validation of settings, including sources

Entity provided documented process

Entity demonstrated change management process designed to identify impacts, provide review and notifications, coordinate (as needed), and identify other possible relay setting changes

Slido Question

What are some of the methods your organization uses to identify and confirm the population applicable to specific Reliability Standards?

Population

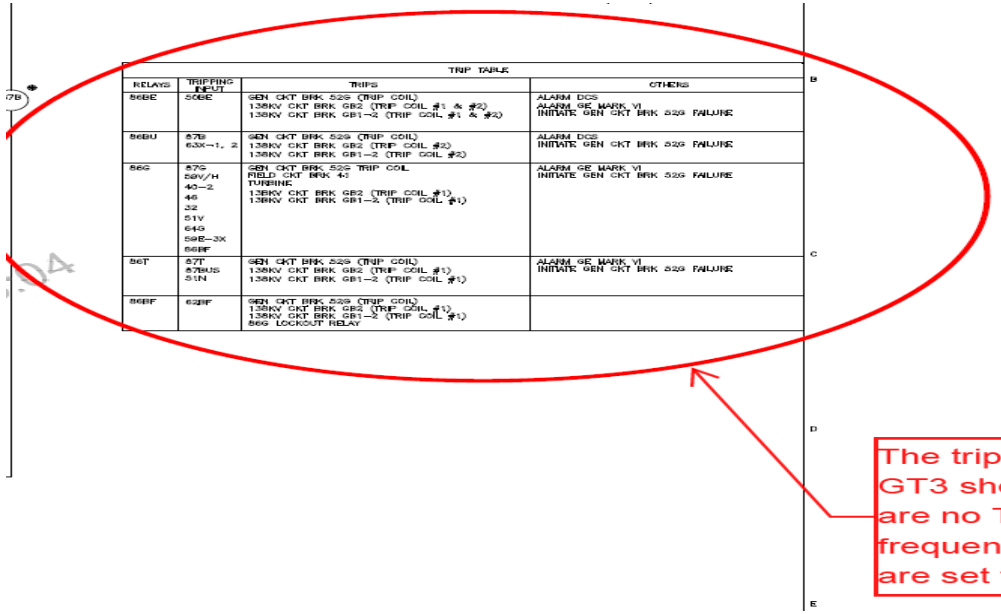
Identify applicable facilities/events/personnel/assets

Explain how population was identified

Population Example – PRC-024-2

Entity identified seven voltage protective relays and no frequency protective relays

Entity explained the documentation and provided examples



TRIP TABLE

RELAYS	TRIPPING INPUT	TRIPS	OTHERS
86BE	50BE	GEN CKT BRK 52G (TRIP COIL) 138KV CKT BRK GB2 (TRIP COIL #1 & #2) 138KV CKT BRK GB1-2 (TRIP COIL #1 & #2)	ALARM DCS ALARM GE MARK VI INITIATE GEN CKT BRK 52G FAILURE
86BU	67B 63X-1, 2	GEN CKT BRK 52G (TRIP COIL) 138KV CKT BRK GB2 (TRIP COIL #2) 138KV CKT BRK GB1-2 (TRIP COIL #2)	ALARM DCS INITIATE GEN CKT BRK 52G FAILURE
86G	87G 59V/H 40-2 46 32 51V 64G 59E-3X 86BF	GEN CKT BRK 52G TRIP COIL FIELD CKT BRK 41 TURBINE 138KV CKT BRK GB2 (TRIP COIL #1) 138KV CKT BRK GB1-2 (TRIP COIL #1)	ALARM GE MARK VI INITIATE GEN CKT BRK 52G FAILURE
86T	87T 87BUS 51N	GEN CKT BRK 52G (TRIP COIL) 138KV CKT BRK GB2 (TRIP COIL #1) 138KV CKT BRK GB1-2 (TRIP COIL #1)	ALARM GE MARK VI INITIATE GEN CKT BRK 52G FAILURE
86BF	62BF	GEN CKT BRK 52G (TRIP COIL) 138KV CKT BRK GB2 (TRIP COIL #1) 138KV CKT BRK GB1-2 (TRIP COIL #1) 86G LOCKOUT RELAY	

The tripping table for GT3 shows that there are no Type 81 frequency relays that are set to trip the unit.

Slido Question

How often does your organization review compliance evidence?

A. Before an engagement
B. Based on standard/requirement periodicity
C. Based on the frequency that a task needs to be performed
D. Unknown

Implementation

Evidence creation and retrieval

Annotate and highlight as necessary

Examples may be appropriate based on population size

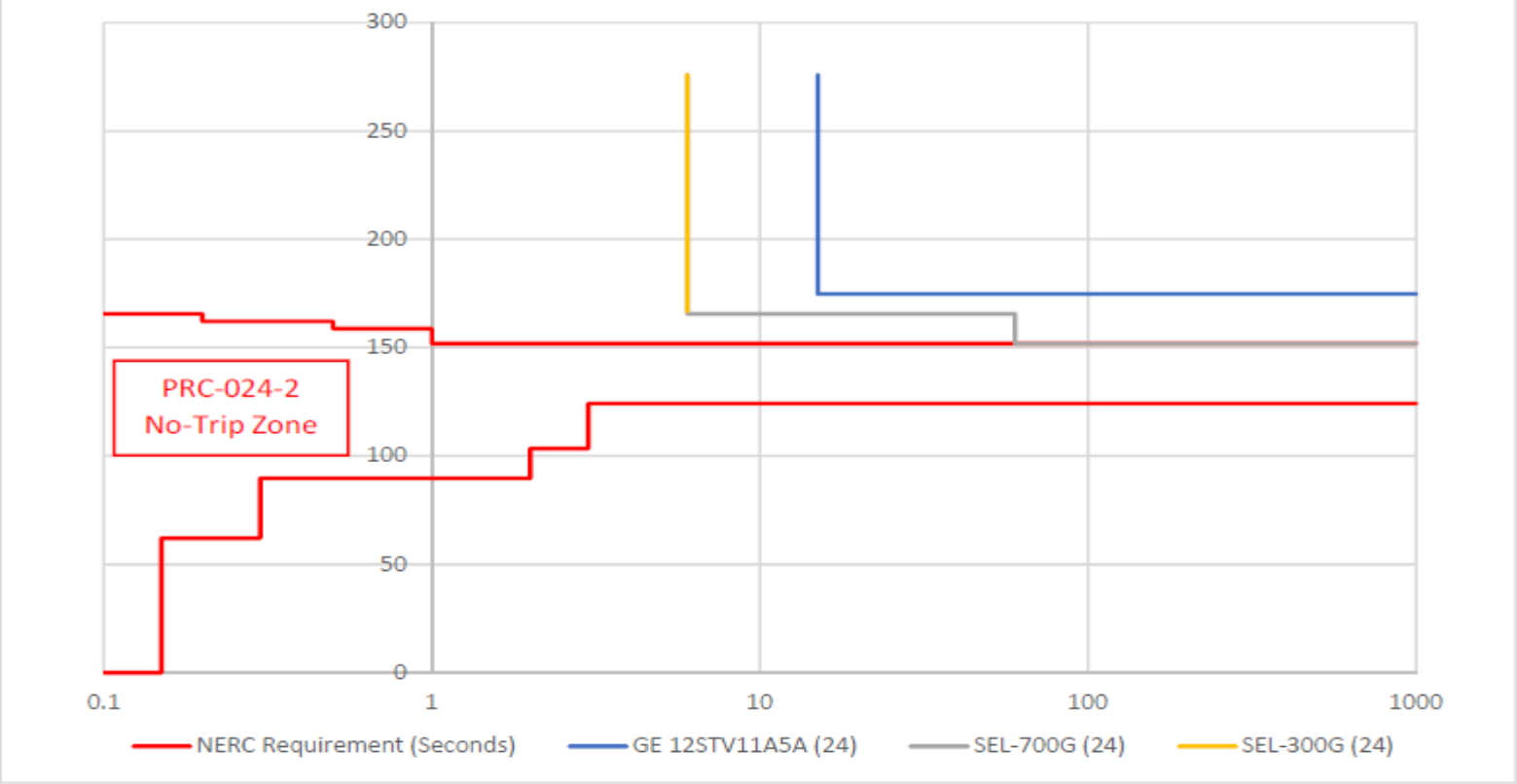
Implementation Evidence

Sufficient	Appropriate	Dated
• 8.99 Sufficiency is a measure of the quantity of evidence used to support the findings and conclusions related to the audit objectives.* • Sampled from the ERO Sampling Handbook	• 8.102 Appropriateness is the measure of the quality of evidence that encompasses the relevance, validity, and reliability of evidence used for addressing the audit objectives and supporting findings and conclusions*	• Needed to demonstrate compliance for many requirements

**Government Auditing Standards (Yellow Book)*

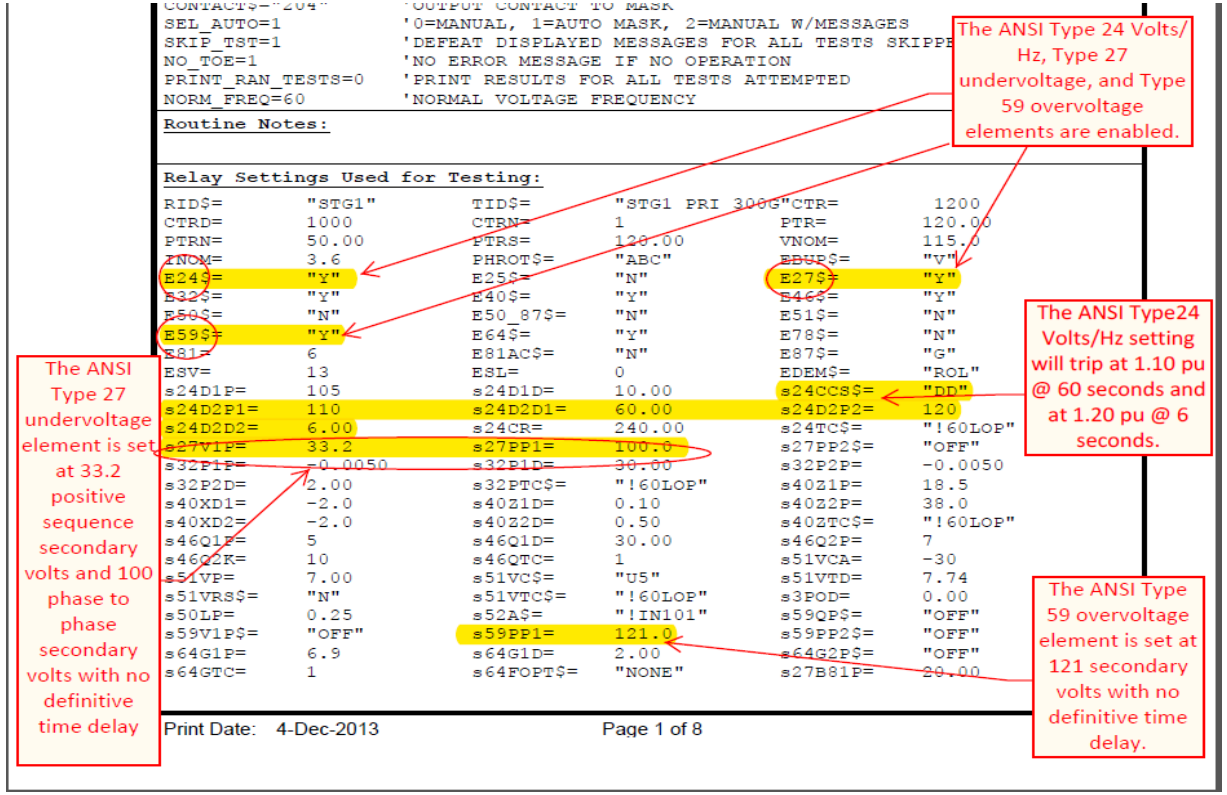
Initial Submission – Implementation Example

Summary of Voltage Protective Relay Settings



Initial Submission – Implementation Example

Annotated Relay Setting Sheets to Support Summary Documentation



```
SEL_AUTO=1          '0=MANUAL, 1=AUTO MASK, 2=MANUAL W/MESSAGES
SKIP_TST=1          'DEFEAT DISPLAYED MESSAGES FOR ALL TESTS SKIPPE
NO_TOE=1            'NO ERROR MESSAGE IF NO OPERATION
PRINT_RAN_TESTS=0   'PRINT RESULTS FOR ALL TESTS ATTEMPTED
NORM_FREQ=60        'NORMAL VOLTAGE FREQUENCY
```

Routine Notes:

Relay Settings Used for Testing:

RID$=	"STG1"	TID$=	"STG1 PRI 300G"	CTR=	1200
CTRD=	1000	CTRN=	1	PTR=	120.00
PTRN=	50.00	PTRS=	120.00	VNOM=	115.0
INOM=	3.6	PHROT$=	"ABC"	EDUP$=	"Y"
E24$=	"Y"	E25$=	"N"	E27$=	"Y"
E32$=	"Y"	E40$=	"Y"	E46$=	"Y"
E50$=	"N"	E50_87$=	"N"	E51$=	"N"
E59$=	"Y"	E64$=	"Y"	E78$=	"N"
E81=	6	E81AC$=	"N"	E87$=	"G"
ESV=	13	ESL=	0	EDEM$=	"ROL"
s24D1P=	105	s24D1D=	10.00	s24CCS$=	"DD"
s24D2P1=	110	s24D2D1=	60.00	s24D2P2=	120
s24D2D2=	6.00	s24CR=	240.00	s24TC$=	"!60LOP"
s27V1P=	33.2	s27PP1=	100.0	s27PP2$=	"OFF"
s32P1P=	-0.0050	s32P1D=	30.00	s32P2P=	-0.0050
s32P2D=	2.00	s32PTC$=	"!60LOP"	s40Z1P=	18.5
s40XD1=	-2.0	s40Z1D=	0.10	s40Z2P=	38.0
s40XD2=	-2.0	s40Z2D=	0.50	s40ZTC$=	"!60LOP"
s46Q1P=	5	s46Q1D=	30.00	s46Q2P=	7
s46Q2K=	10	s46QTC=	1	s51VCA=	-30
s51VP=	7.00	s51VC$=	"U5"	s51VTD=	7.74
s51VRS$=	"N"	s51VTC$=	"!60LOP"	s3POD=	0.00
s50LP=	0.25	s52A$=	"!IN101"	s59QP$=	"OFF"
s59V1P$=	"OFF"	s59PP1=	121.0	s59PP2$=	"OFF"
s64G1P=	6.9	s64G1D=	2.00	s64G2P$=	"OFF"
s64GTC=	1	s64FOPT$=	"NONE"	s27B81P=	20.00

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The ANSI Type 24 Volts/Hz, Type 27 undervoltage, and Type 59 overvoltage elements are enabled.

The ANSI Type24 Volts/Hz setting will trip at 1.10 pu @ 60 seconds and at 1.20 pu @ 6 seconds.

The ANSI Type 27 undervoltage element is set at 33.2 positive sequence secondary volts and 100 phase to phase secondary volts with no definitive time delay

The ANSI Type 59 overvoltage element is set at 121 secondary volts with no definitive time delay.

Initial Submission – Implementation Example

Annotated Relay Setting Sheets to Support Summary Documentation

Only the Type 24 element is set to trip - and it does not reside in PRC-024-2's no-trip zone.

```
SV11PU=     0.02          SV11DO=     0.00          SV12$=      "81D5"
SV12PU=     90.00         SV12DO=     0.00          SV13$=      "81D6"
SV13PU=     1.00          SV13DO=     0.00          TDURD=      0.16
TR1$=       "64G1T + 46Q2T + 24C2T + 40Z1T + 40Z2T + 87U + 87R"ULTR1$=
"3PO"         TR2$=       "INADT + 32P1T + 51VT + SV8T + SV9T + SV10T + SV11T +
SV12T+ SV13T"
ULTR2$=     "3PO"         TR3=        0             ULTR3=      0
TR4$=       "IN101 * IN102 * 32P2T"ULTR4$=     "3PO"          CLEN=
1
CL=         0             ULCL=       1             CLSD=       0.00
ER$=        "/24C2 + /32P1 + /46Q2 + /51V + /64G1 + /64G2 + /60LOP+ /81D1 +
/81D2 + \81D1 + \81D2 + /BNDA + /BNDT+ /INAD + /TRIP1 + /TRIP2"OUT101$=
"TRIP1"       OUT102$=    "TRIP4 + TRIP2"
OUT103$=    "TRIP4 + TRIP2"OUT104$=     "60LOP"       OUT105$=    "SV3T"
OUT106$=    "TR1"         OUT107$=    "TR2 + TR4"   OUT201$=    "51VT"
OUT202$=    "SV8T + SV9T + SV10T + SV11T + SV12T + SV13T"OUT203$=
"46Q1T"       OUT204=     0
OUT205$=    "32P1"        OUT206$=    "64G1T"       OUT207$=    "87R + 87U"
OUT208$=    "40Z1T + 40Z2T"OUT209$=     "SV4T + 46Q2T"OUT210$=    "81D5T + 81D6T"
OUT211$=    "SV1T + SV2T" OUT212$=    "ALARM"       LER=        15
PRE=        4             FP_TO=      15            DATE_F$=    "MDY"
DCLOP$=     "OFF"         DCHIP$=     "OFF"         FNOM=       60
DELTA_Y$=   "D"           TGR=        3             SS1=        1
SS2=        0             BKMON=      0             IN101D=     0.25
IN102D=     0.25          IN103D=     0.25          IN104D=     0.25
IN105D=     0.25          IN106D=     0.25          IN201D=     0.25
IN202D=     0.25          IN203D=     0.25          IN204D=     0.25
IN205D=     0.25          IN206D=     0.25          IN207D=     0.25
IN208D=     0.25          NLB1$=      " "           NLB2$=      " "
NLB3$=      " "           NLB4$=      " "           NLB5$=      " "
NLB6$=      " "           NLB7$=      " "           NLB8$=      " "
NLB9$=      " "           NLB10$=     " "           NLB11$=     " "
```

Key Points

Tell the Story (Process)

What is Applicable? (Population)

How Did You Do It? (Implementation)

- Retrievable evidence
- Sufficient and appropriate evidence
- Annotated complete information

Contacts

William Braun
Senior Compliance Analyst
William.Braun@texasre.org 512-583-4987

Upcoming Sessions

- ~~June 5 – Intro to Align~~
- ~~June 6 – Standards Development~~
- ~~June 8 – Compliance Monitoring~~
- ~~June 13 – CIP 201~~
- ~~June 14 – Foundations of O&P~~
- ~~June 15 – O&P 201~~
- ~~June 20 – Risk-Based Approach to Reliability~~
- ~~June 21 – Improving Self-Reporting 201~~
- ~~June 22 – NERC Data Submission, Events Analysis, and Guidelines~~
- ~~June 27 – Initial Engagement Submissions~~
- June 29 – Reliability Services

TEXAS RE
Ensuring electric reliability for Texans