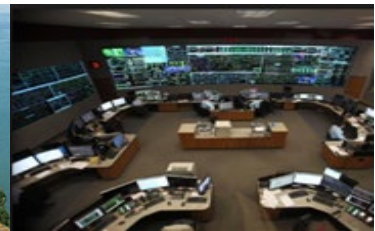




FAC-003/FAC-008 Walk-Down Guide

Beth Rettig, Senior Technical Auditor
Curtis Crum, Principal Technical Auditor
October 11, 2021



Field Walk-Down Intent

Intent: Ensure field practices match compliance program documentation and expectations by incorporating field walk-downs during onsite engagements.



Partnership with Industry

- All field findings will be done in partnership with entity staff
- We expect at least the PCC and SME to be present during walk-downs
- Walk-downs provide the entity an opportunity to showcase their implementation of best practices and will assist with the implementation industry wide via knowledge sharing



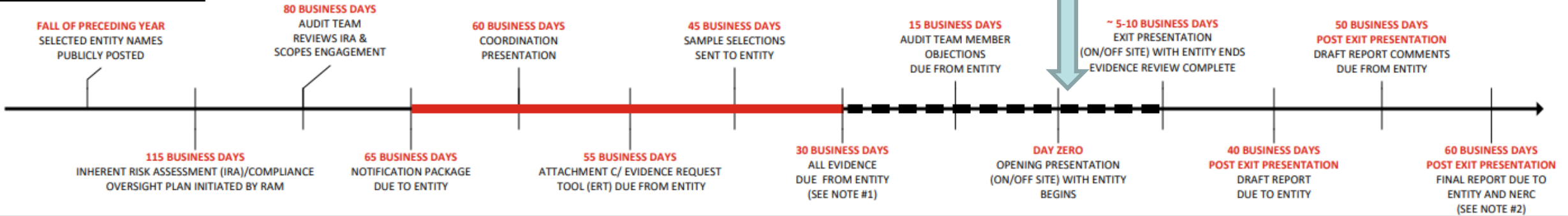
Safety

- The ATL will coordinate with the PCC in advance to understand and coordinate the required PPE
- ATL will coordinate with the PCC for access to each site
 - SME will be responsible for opening cabinets and control boxes
- RF staff do not plan to enter active construction sites
- A tailgate safety session will be conducted before entering each site

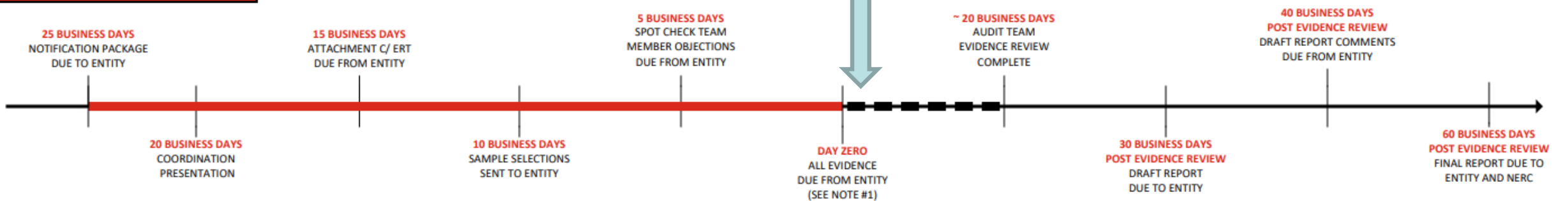


Walk-Down Timeframe

AUDIT TIMELINE



SPOT CHECK TIMELINE



- Walk-downs typically occur during onsite audit engagements
- May experience a targeted walk-down as a result of a previous engagement



FAC-003 FIELD WALK-DOWN



FAC-003 Walk-Down Purpose

Purpose: NERC and ReliabilityFirst (RF) have identified a trend of vegetation related outages impacting the reliability of the Bulk Electric System. The FAC-003 Standard is also recognized as one of the higher risk elements.

The purpose of these walk-downs is to ensure the entity's Transmission Vegetation Maintenance Program (TVMP) and written program processes match field practices (maintenance, inspection, and constraint documentation and follow-up)



*Enviroincentives.com



*Bureau of Land Management



*t2environment.com

Planning, Communication & Tools

Planning and Communication:

- Attachment C's
- Google Earth
- SME Interviews
- Evidence Review



Tools and Apps:

- Tree Identification
- Clinometer
- Photo documentation
- Measuring tape
- ROW width(s), restriction list (R5), inspection records (R6), maintenance records (R7)



FAC-003 Walk-Down Procedure

Walk Down Procedure:

- Circuit/Span Selection
 - Conducted in coordination with FAC-008 if applicable
 - Plan on a half to full day during the onsite engagement
 - Urban, suburban and rural locations to be considered
 - Two or more different areas of responsibility (forester/arborist)
- Number of random spans will be determined by the ATL
 - Intent is to select spans with relatively easy access
- Locations to be evaluated based on program specifics (R3, R5, R6, and R7)



Evidence Collection:

- ROW width
- Tree species/location
- Tree height
- Cross reference constraint location list, inspection and maintenance records

FAC-008 FIELD WALK-DOWN



FAC-008 Field Walk-Down Purpose

Purpose: Incent GOs and TOs to identify and avoid possible discrepancies in the list of elements and their ratings used to develop Facility Ratings.



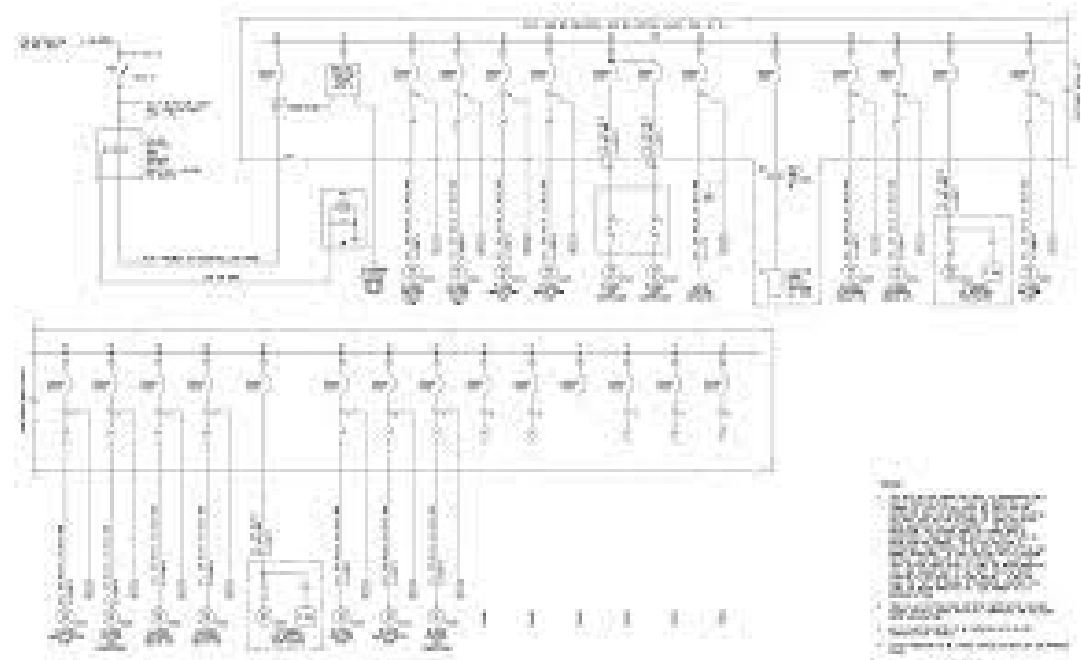
Risk:

- Overrating - unknown overloads of equipment that can damage equipment, reduce life of equipment, and create possible safety concerns.
- Underrating - overuse of off cost operations to mitigate false actual or post contingency overloads.

Planning and Communication

Entity Coordination after Audit Notification

- Request circuit maps
- Identify high risk circuits, IROs, critical lines
- One-lines, three-lines, ratings database, elevation drawings, system drawings, line drawings, etc. are used for:
 - Selection
 - Walk-down preparation



FAC-008 Facility Selection

- **Start with Attachment C**
- **Considerations for selection:**
 - Travel time
 - Coordination between FAC-003 and FAC-008 walk-downs
 - Risk
 - Critical facilities
 - Complex bus arrangements
 - Recent upgrades, replacements
 - Lines with underground segments or water crossings
- **Subject to change during audit**



Appropriate PPE

Tools

- Field walk-down list
- Binoculars or equivalent
- Photo Documentation
- Drawings (substation site, substation elevation, circuit, etc.)
- Facility rating datasheet
- Checkoff Guide



FAC-008 Walk-Down Procedure

- View prints to identify components
- Ensure all components in field are shown on the Facility Ratings documentation
- Collect component data with entity
- Verify equipment on prints and/or Facility Rating documentation to actual ratings found in the field
- Identify and document discrepancies



WALK-DOWN CLOSING



Field Walk-Down Checkoff Guide

FAC-008
Location 1

Date:
Entity:
Attendees:
Safety Brief Completed (Y/N):

	Facility Name
	Physical Location Identification of Components
	Number of Components Reviewed
	Findings (Components, Ratings Source, Ratings, Photos)
	Team Review
	Findings reviewed with Entity Personnel prior to leaving field location(s)
	Findings reviewed with Enforcement Staff

FAC-003
Location 1

	Safety Brief Completed
	Circuit Name
	Physical Location/Tower Identification
	# of Spans Reviewed
	Findings (ROW Width, Tree ID, Tree Height, Pictures)
	Team Review
	Findings reviewed with Entity Personnel prior to leaving field location(s)
	Findings reviewed with Enforcement Staff



Evidence Documentation & Walk-Down Wrap Up

- Findings review with entity while on-site
 - Positive Observations
 - Recommendations
 - AOC's/PNC's
- RF will try and coordinate to ensure any necessary evidence may be obtained while we are already on-site.
- Field findings documented in MK/Align
 - Photo documentation
 - Check-off guides
- Root cause of findings, extent of condition, and mitigating factors
- Recommend follow-up as necessary
- Assist visit



Questions & Answers

Forward Together  **ReliabilityFirst**