



Internal Controls

Internal Controls are the processes and tools an entity uses to meet identified objectives. Controls to ensure that facility ratings are up to date include:

- Change management path and communication channels with expected timings
- Roles/responsibilities
- Inventory maintenance
- Internal risk-based self-audits/periodic reviews
- One-line/elevation drawing maintenance
- Document Change management



Methodology

FAC-008 requires registered entities to have a methodology and/or documentation that includes the method, assumptions, and process for determining Facility Ratings.

- All Equipment types
- Configuration considerations
- MLSE "map" for each Facility
- Manufacturer specs referenced/available
- Detailed explanation for standard application of equipment ratings and reasons to consider other options
- Ownership coordination/application
- Consistency check points built in (e.g., one-lines match operations match ERCOT match etc.)



Evidence

Detailed Facility Rating Methodology document including application/implementation of the methodology

Manufacturer specifications

One-lines/elevation drawings

Series element Ratings for all sampled Facilities.

- MLSE clearly identified
- All rating types clearly defined



Evidence (cont.)

Nameplate photos / manufacturing documentation to support the provided ratings

EMS/GMS alarms (e.g., philosophy and application)

Facility Ratings database (demonstration of consistency for application and use in different systems)

Communication with ERCOT/others

Sampling should include higher risk Facilities (e.g., RAS Facilities, IROL, 345 kV, etc.)

Other as needed based on information received



Issues Identified During Audits

Change management process gaps (normal, storm restoration, etc.)

Omitting an element in methodology (e.g., jumpers, relay consideration)

Internal Facility Ratings tracking system/database

One-line/elevation drawings not maintained/consistent

System configuration/Jointly owned Facilities not taken into consideration (MLSE)



Issues Identified During Audits (cont.)

Insufficient process in place for entity to keep track of series elements

Internal and external communication breakdown

ERCOT versus internal versus operations versus planning inconsistencies

Name plate ratings do not match one-lines

Entity's communication responsibilities

Unable to provide manufacture rating/nameplate



Issues Identified During Audits (cont.)

Regurgitating Standard language in FRM without specifics

Not consistently applying the FRM or being able to demonstrate consistency

Clarity in documentation. Avoid contradictory statements or broad statements (e.g., "Changes in the FRM do not require a review of Facility Ratings already developed")

Normal and emergency ratings are the same without technical support.

Configurations not accounted for in developing MLSE (e.g., breaker and a half schemes)

An inability to document and explain any issues noted in the review the Facility Ratings Methodology and the supporting documentation



Potential Findings

Some general points that may lead to recommendations, areas of concern, or potential noncompliance depending on facts and circumstances include:

- Lack of a fully developed process to ensure that the Facility Ratings Methodology is developed, maintained, and followed.
- Lack of a fully developed process to track Equipment and Facility status (i.e., new, existing, modified, re-rates) and their respective Ratings.
- Lack of internal guidance and expectations specifying documentation needs for determining Facility Ratings for each role involved.
- Lack of a clear process required to identify and document Equipment and Facility ownership, connectivity, and most limiting series elements.



Potential Findings (cont.)

Some general points that may lead to recommendations, areas of concern, or potential noncompliance depending on facts and circumstances include:

- Lack of documentation to define, communicate, and apply technically sound assumptions used in developing Ratings
- Lack of formalized training for personnel developing Facility Ratings
- Lack of a fully developed process to manage requests for information that the entity is obligated to provide
- Lack of a fully developed process that describes how the Thermal Rating for the next most limiting equipment is identified



Contact



Curtis Crews Director, O&P Compliance and Risk Assessment

Curtis.Crews@texasre.org

512-583-4989

