



# Facility Ratings Best Practices

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# Facility Ratings

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- [ERO Enterprise Themes and Best Practices for Sustaining Accurate Facility Ratings](#)
- Appendix A provides some helpful facility ratings resources

# Importance of Accurate Facility Ratings for a Reliable BES



# Themes

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- Theme 1: Lack of Awareness
- Theme 2: Inadequate Asset and Data Management
- Theme 3: Inadequate Change Management
- Theme 4: Inconsistent Development and Application of Facility Ratings Methodologies

# Theme 1: Lack of Awareness

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- Failure to adequately document or maintain an accurate equipment inventory
- Failure to understand the current carrying series equipment within its electrical system
- An ineffective facility ratings validation program, including identifying and assessing potential program deficiencies, inadequate methodology, or inadequate processes and procedures

# Suggestions

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- Senior Management Engagement, Oversight, and Focus on Program Sustainability and Reliability
  - An entity's management team plays a vital role in developing an effective and sustainable facility ratings program and correcting or preventing issues stemming from lack of awareness
- Establish an Accurate Baseline: In-Field Verification
  - A program that includes periodic facility in-field verifications—including after an equipment change—increases the likelihood that the entity's documented facility ratings are consistent with what is deployed
- New Installations and Commissioning
- Corrective Action Program

# Suggestions

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- New Installations and Commissioning
  - The ERO Enterprise has observed that certain deficiencies in entities' facility ratings programs have been in place since the initial installation of the substation or facility
- Corrective Action Program
  - A corrective action program is a risk management and continuous improvement tool integral to sustaining safe and reliable operations
- Registered Entity Engagement with ERO Enterprise

# Suggestions

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- Registered Entity Engagement with ERO Enterprise
  - To improve the chances of identifying and addressing deficiencies in an entity's facility ratings program before they occur, the ERO Enterprise recommends that registered entities continuously monitor ERO Enterprise communications; in particular, in recent years, the ERO Enterprise has performed a significant amount of dedicated facility ratings outreach and communications



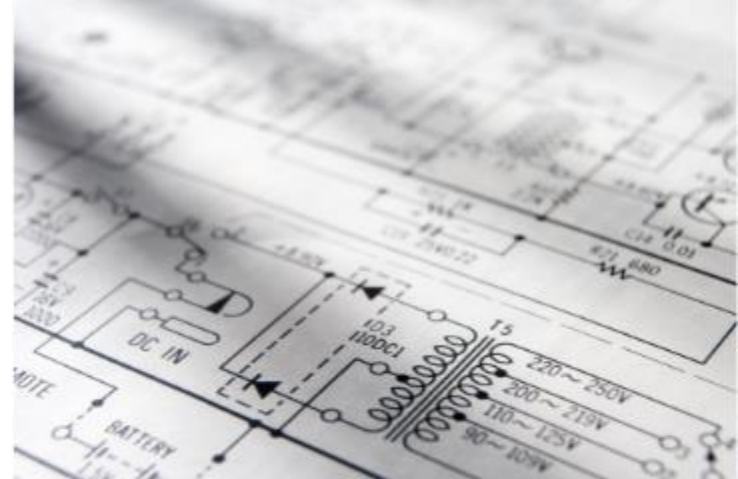
# Theme 2: Inadequate Asset and Data Management

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- Challenges:
  - Large amounts of equipment and facility ratings data to manage
  - Large amounts of changing equipment due to aging infrastructure
  - Lack of official, well-controlled facility ratings database
  - Reliance on contractors without proper training or oversight



Substation matches One-line



Operations safely  
and reliably  
operating all assets

Field Verification

Equipment  
entered into  
Ratings Database



Facility Ratings correct in  
EMS and Planning Models



# Controls

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- In-field verification (e.g., walk-downs)
- Quality assurance reviews
- An official facility ratings database or repository with strict access controls
- Data entry verification
- Contractor management controls

# Suggestions

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- In-Field Verification and Quality Assurance Reviews
  - Performing an in-field verification of equipment by physically walking-down facilities can be one of the most effective controls to ensure that an entity has identified and inventoried every piece of equipment in the field
- Facility Ratings Database, Effective Data Capture and Verification, and Access Controls
  - Some registered entities use facility ratings spreadsheets to manage their facility ratings while others may use a formal facility ratings database(s)

# Suggestions

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- Contractor Management
  - The ERO Enterprise strongly recommends that entities establish effective contractor management to reduce the risk of asset and data management failures that could affect equipment ratings or facility ratings

# Theme 3: Inadequate Change Management

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- Common Change Management Failures:
  - Lack of, or delay in, communicating changes to all necessary personnel
  - Lack of data entry verification
  - Lack of oversight over contractors performing facility ratings work

# Change Management Controls

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- Change checklist
- Quality assurance reviews after any change
- Validation through periodic reviews
- Data entry verification
- Periodic in-field verifications

# Suggestions

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- Strong Change Management Process
  - An entity that is not properly tracking, documenting, and communicating all field changes to the appropriate individuals and groups when equipment changes occur has an increased risk of using inaccurate facility ratings
- Personnel Training
  - An entity's change management process should include a comprehensive training program with a knowledge assessment for all personnel involved in the change management process



# Suggestions

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- Periodic In-Field Verification
  - Even where an entity has previously performed in-field verifications, there is no guarantee that facility ratings remain accurate since equipment in the field can be added or removed in following years

## Theme 4: Inconsistent Development and Application of Facility Ratings Methodologies

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- Each applicable registered entity is required to have a documented methodology for determining facility ratings of its solely and jointly owned facilities
- There are coordination challenges when facilities are jointly owned, particularly given that each owner can establish its own facility ratings methodology
- The ERO Enterprise has also observed that numerous entities are failing to identify the next most limiting element. When the most limiting element is removed from service, it is important to know the next most limiting element to ensure reliability

# Suggestions

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- Best practices show that entities that are most successful in this area:
  - Develop and maintain a detailed and comprehensive facility ratings methodology
  - Provide the specific rating method for each class and type of element in a BES facility
  - Train appropriate personnel on how to apply the methodology
- Entities should also increase coordination with neighboring entities to understand not only what their limiting elements are but also how their methodology may be different from their own and consider adopting a joint consistent facility rating methodology for facilities that have more than one owner

# Sustaining Facility Ratings Programs

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- Best practices used by companies that have positioned their facility ratings programs for long-term sustainability:
  - Robust documented change management process
  - Inventory management tools, with required training
  - Checklists for new inventory to be added
  - Effective data capture processes
  - Single database for master record keeping

# Sustaining Facility Ratings Programs

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- Access controls established for facility management tools
- Built in quality assurance reviews in concert with internal controls
- Periodic in-field validation and field walk-downs
- Facility ratings program owner
- Management oversight

## Contact:

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