Application of Settings in the Field

**Issue Summary**
Settings applied incorrectly in the field lead to misoperations. Modern protection devices contain hundreds of setting options depending on their intended use, which increases the complexity of the application process and introduces opportunities for human error. Training, personnel management, and quality controls can help ensure setting application processes are followed and reduce associated misoperations.

**Analysis**
Half of protection system misoperations have root or contributing causes related to human error. The Human Error category includes misoperations due to errors in relay scheme logic and design, application of designed settings to equipment, and as-left personnel errors.

**Time Estimates & Action Plan**
- **18 MO**
  WECC hosts a webinar or workshop with presentations from subject matter experts on challenges and techniques for application of settings in the field.

- **09 MO**
  Entities follow the checklist provided in the Process, Issues, Trends, and Quality Control of Relay Settings IEEE PSRC Working Group report to review processes involving application of settings in the field and commission testing.

- **18 MO**
  WECC, the RWG, and subject matter experts develop a best practice guide with examples of effective setting application and provide points of contact for entities interested in refining their process.

**Questions to consider:**
1. Is this an appropriate issue for the Misoperations Reduction Strategy?
2. How would you rank the priority of this issue (high, medium or low), and why?
3. Do you feel each action could be accomplished in the proposed time frame?
4. Does the Action Plan adequately address the issue?
5. What is the likelihood that your company would adopt the Action Plan (likely, possibly, unlikely), and why?