§ 238.601 Scope.

This subpart contains specific safety planning requirements for the operation of Tier II passenger equipment, procurement of Tier II passenger equipment, and the introduction or major upgrade of new technology in existing Tier II passenger equipment that affects a safety system on such equipment.

§ 238.603 Safety planning requirements.

(a) Prior to commencing revenue service operation of Tier II passenger equipment, each railroad shall prepare and execute a written plan for the safe operation of such equipment. The plan may be combined with any other plan required under this part. The plan shall be updated at least every 365 days. At a minimum, the plan shall describe the approaches and processes to:

(1) Identify all requirements necessary for the safe operation of the equipment in its operating environment;

(2) Identify all known or potential hazards to the safe operation of the equipment;

(3) Eliminate or reduce the risk posed by each hazard identified to an acceptable level using a formal safety methodology such as MIL-STD-882; and

(4) Impose operational limitations, as necessary, on the operation of the equipment if the equipment cannot meet safety requirements.

(b) For the procurement of Tier II passenger equipment, and for each major upgrade or introduction of new technology in existing Tier II passenger equipment that affects a safety system on such equipment, each railroad shall prepare and execute a written safety plan. The plan may be combined with any other plan required under this part. The plan shall describe the approaches and processes to:

(1) Identify all safety requirements governing the design of the passenger equipment and its supporting systems;

(2) Evaluate the total system, including hardware, software, testing, and support activities, to identify known or
potential safety hazards over the life cycle of the equipment;

(3) Identify safety issues during design reviews;

(4) Eliminate or reduce the risk posed by each hazard identified to an acceptable level using a formal safety methodology such as MIL-STD-882;

(5) Monitor the progress in resolving safety issues, reducing hazards, and meeting safety requirements;

(6) Develop a program of testing or analysis, or both, to demonstrate that safety requirements have been met; and

(7) Impose operational limitations, as necessary, on the operation of the equipment if the equipment cannot meet safety requirements.

(c) Each railroad shall maintain sufficient documentation to demonstrate how the operation and design of its Tier II passenger equipment complies with safety requirements or, as appropriate, addresses safety requirements under paragraphs (a)(4) and (b)(7) of this section. Each railroad shall maintain sufficient documentation to track how safety issues are raised and resolved.

(d) Each railroad shall make available to FRA for inspection and copying upon request each safety plan required by this section and any documentation required pursuant to such plan.

[64 FR 25660, May 12, 1999, as amended at 67 FR 19994, Apr. 23, 2002]

APPENDIX A TO PART 238—SCHEDULE OF CIVIL PENALTIES 1

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**SUBPART A—GENERAL**

- 238.15 Movement of power brake defects:
  - (b)(4) Failure to determine percent operative brake ........................................ 2,500 5,000
  - (c)(3) Insufficient tag or record ........................................................................ 1,000 2,000
  - (d) Failure to follow operating restrictions ......................................................... 5,000 7,500
  - (e) Failure to follow restrictions for inoperative front or rear unit ................. 2,500 5,000

- 238.17 Movement of other than power brake defects: 1
  - (c)(4), (6) Insufficient tag or record ................................................................. 1,000 2,000
  - (d) Failure to inspect or improper use of roller bearings .................................... 2,500 5,000

- 238.19 Reporting and tracking defective equipment:
  - (a) Failure to have reporting or tracking system ............................................... 7,500 11,000
  - (b) Failure to list power brake defect points ..................................................... 2,000 4,000
  - (c) Failure to make records available ................................................................. 1,000 2,000

**SUBPART B—SAFETY PLANNING AND GENERAL REQUIREMENTS**

- 238.103 Fire protection plan/fire safety
  - (a), (b), (c) Failure to use proper materials ...................................................... 5,000 7,500
  - (d) Failure to consider fire safety on new equipment ......................................... 5,000 7,500
  - (e) Failure to perform fire safety analysis ........................................................... 5,000 7,500

- 238.105 Train electronic hardware and software safety
  - (a) Failure to develop or adopt program .............................................................. 7,500 11,000
  - (b) Failure to include required design features .................................................. 5,000 7,500
  - (c) Failure to comply with hardware and software program ............................ 5,000 7,500

- 238.107 Inspection, testing, and maintenance plan:
  - (b) Failure to develop plan .................................................................................. 7,500 11,000
  - (d) Failure to conduct annual review ................................................................. 5,000 7,500

- 238.109 Training, qualification, and designation program:
  - (a) Failure to develop or adopt program .............................................................. 7,500 11,000
  - (b) Failure to include specific required provision of the program ...................... 5,000 7,500

- 238.111 Pre-revenue service acceptance testing plan:
  - (a) Failure to properly test previously used equipment ...................................... 7,500 11,000
  - (b) Failure to comply with plan ......................................................................... 5,000 7,500
  - (c) Failure to develop plan ................................................................................. 7,500 11,000
  - (d) Failure to comply with plan ......................................................................... 5,000 7,500

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