49 CFR Part 238 Equipment Rule
Changes are on the Way!

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Need for Current Regulatory Efforts

- Industry has been implementing new technologies, design improvements and innovations for passenger rolling stock to address current needs for service.
- Historically FRA worked with Industry through various Waiver Petition processes to approve use of alternatively designed equipment.
- All parties agreed to move forward with rulemaking process to codify lessons learned from Waiver Petition process:
  - Decrease project risk due to uncertainty of regulatory review.
  - Decrease costs due to potential standardization.
Industry Concerns

- Tier III requirements required clarity on multiple fronts
- Approval procedure currently undefined and results in interpretation by FRA regional staff in some cases
- As more and more passenger railroads and procurements took place, led to a lot of repeat testing
  - Charger locomotive was tested on multiple corridors without much benefit
- AAR members were frustrated because of track tie up and throughput issues
Passenger Equipment Alternative Compliance

Engineering Task Force Established by Passenger Safety Working Group in 2009

- **Original Task:**
  - Develop alternative crashworthiness criteria and waiver guidance - published 10/28/2011

- **Revised Task:**
  - Provide recommendations for revised equipment regulations - *Includes completion of Tier III regulations*
Passenger Equipment Alternative Compliance

• Industry has collaboratively worked with FRA under auspices of the Railroad Safety Advisory Committee (RSAC) to draft consensus based rule-text

• Passenger Equipment Alternative Compliance (Tier III) (Final Rule)
  - NPRM was published December 6, 2016
  - Comment period ended February 6, 2017
  - extended at request of APTA
  - FRA received 10 sets of comments
  - Engineering Task Force discussed comments with FRA
  - Final rule estimated sometime in 2018
Passenger Equipment Alternative Compliance

**NPRM 1** – issued December 2016

- Tier I trainset alternative crashworthiness
- Tier III trainset crashworthiness standards
- Align Tier II MAS with new VTI rule (160mph)
- Codify Tier III Glazing and NPRM 1 consensus items
- Tier III Braking Systems

Final Rule – expected 2018
Passenger Equipment Alternative Compliance

NPRM 2 – expected 2018

Final Rule – expected ?

NPRM 2: (In Development)

Tier III Safety Appliances
Incorporate 49 CFR Part for Tier III
Alternative crashworthiness for single car/locomotive
Tier III ITM and MODE
Update Testing/Commissioning Requirements
Update to Tier I passenger trainset/loco safety appliances
ECP Brakes
Door systems
A New Path Forward

- One new section proposed for 49 CFR Part 238.110 related to design documentation, review and approval
  - Approval language drafted in the Engineering Task Force would result in type approvals
  - If the paint changes on a locomotive/car it should not require FRA to approve the design

- As part of dynamic testing, there will be two paths
  - If a car builder conducts dynamic simulations and testing, the equipment could receive portability as long as the maximum speed and cant deficiency stays the same
  - The current path of testing only would be retained for low cost procurements
Summary

- Final Rule for NPRM1 developed through the consensus process and provide clear description of the safety requirements.
- Consensus achieved on lot of items for NPRM2 and very elements remain.
- If proposed changes make it into a final rule, those would result in considerable cost savings for the passenger equipment industry.
- Final rule would result in increased safety and clarity.
- Within details of rule-text, FRA may incorporate by reference specific requirements contained within APTA Standards.
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- Many others
Questions?