



*Our Vision: The NGEC will provide national leadership in standardization, acquisition, and management of passenger rail equipment.*

## NGEC Technical Subcommittee

MINUTES

SEPT. 12, 2024

3:00PM EASTERN

TEAMS MEETING

<b>FACILITATOR</b>	<i>Dan Ruppert, Chair, NGEC Technical Subcommittee</i>
<b>ATTENDEES</b>	<b>Core Team Members:</b> <i>Dan Ruppert, Melissa Shurland, Maria Hobbs, Curtis McDowell, Art Peterson, Michael Cameron for Ray Hessinger, Patricia Liana, Tammy Krause, Kevin Myles, Jennifer Bastian, Larry Salci, Steve Hewitt</i> <b>Industry Members:</b> <i>Rich Stegner, Paul Jamieson, Ed Golitko, Kevin Sudano, David Wilcock, Fank Pazcazio, Rich Bowie, Allen Meek, Rocky Chong, Bill Luebke, Marcin Taraszkiwicz</i>
<b>ABSENTEES</b>	<i>Matthew Simmons, Troy Hughes, Mike Jenkins, Curt Massie, Ray Hessinger, Marci Petterson, Ryan Sharpe, Sarah Hernandez, Tarek Omar, Joe Paul, Barley Fields</i>

### DISCUSSION/DECISIONS MADE

**1.**

Technical subcommittee Chair Dan Ruppert, Amtrak, called the meeting to order and asked Steve Hewitt to call the roll of core team members.

After calling the roll, Steve Hewitt could not confirm the presence of a quorum. It was agreed to go forward with the meeting, but to table the approval of the minutes from 8-15-24 until the next meeting (9-26-24).

**As always, industry participants are asked to email a notification of their attendance to Steve Hewitt at [shewitt109@aol.com](mailto:shewitt109@aol.com) insufficient state representation.**

**2.**

**Review Action Items – Steve Hewitt, NGEC Program Manager:**

**2024 NGEC Backgrounder educational document:**

The 2024 NGEC two-pager is now available in hard copy by request of Steve Hewitt at [shewitt109@aol.com](mailto:shewitt109@aol.com).

To date 488 copies have been distributed.

**Maintaining Industry Participation List:**

There are currently around 200 industry participants.

**Any updates or changes should be sent to Steve Hewitt at [shewitt109@aol.com](mailto:shewitt109@aol.com).**

**2025 NGEC Annual Meeting – new location:**

The NGEC 2025 Annual Meeting will be held on 1-30-25 in the afternoon in **Crystal City, VA at the [Renaissance Arlington Capital View](#).**

NGEC is scheduled for Noon to 5:00PM on 1-30-25.

**NGEC Future Funding – Status: CRISI Grant Application:**

The CRISI Grant Application for funding the NGEC was submitted on time to the portal. It included many letters of support. **It is**

**not too late to send in support letters.** They should be sent to Tim Ziethen and Mehgan Histan, Amtrak Grants.

Award announcements will take place in the October/November time period.

**3.**

**Approval of the Minutes from 8-15-24:**

This item was tabled due to the lack of a quorum..

**4.**

**Update: Multi-State Venture Car procurement –Steve Hewitt for Caltrans:**

Caltrans, provided the following update for inclusion in today's minutes read into the record by Steve Hewitt:

*All coach type FDR and FAI stages are complete, including Cab Car and Café Car.*

*The Cab Car FAI and FRA sample car inspections are complete, and the first cars are being prepared for conditional acceptance. The Cab Car 238.111(b) testing is complete, and the test report is nearly complete. The first café cars have been shipped to Chicago and are entering revenue service.*

*All 137 cars are in production or have been produced at Siemens Sacramento Facility. IDOT coaches and Caltrans trainsets are being added to revenue service as they are commissioned and accepted.*

**5.**

**Update: Metro-North Dual Mode Locomotive – NYSDOT:**

There was no report provided for this meeting so this item will be taken up on 9-26-24 if a report is available.

**6.**

**Update: Amtrak Vehicle Procurements – Dan Ruppert:**

Dan Ruppert provided a brief update:

On the new Acela:

Qualification testing continues. All parties are working well together (Amtrak, the OEM and FRA). There have been no significant issues during testing -the trainset is performing well. Within the next month or so the final report should be submitted to FRA.

All in all, the project continues to progress well.

On Airo:

This procurement is progressing well and is on schedule. There are 63 cars in production - 59 coach cars and 4 locomotives. A variety of FAIs are wrapping up. They are working with the car builder on several subcomponents such as HVAC, seating etc. The intent is to have the first trainset on the corridor for testing in the spring of 2025.

On the ALC 42:

Dan reported that they are progressing in a steady state. There are 58 locomotives in service 4 are in for commissioning. FMI testing is taking place "as we speak" mitigating a few issues.

On the Long-Distance Trainsets:

Continues as an active RFP. It is moving along well with Amtrak working with carbuilders – with questions going back and forth.

**7.**

**Update: CtDOT Rail Car Procurement – Marci Petterson, CtDOT:**

Marci Petterson was not available today, so this item was also tabled until the next meeting if an update is available.

**8.**

**Document Control Update – Tammy Krause:**

Tammy Krause provided the following update for inclusion in the minutes of today's minutes:

The Mechanical Working Group (WG) met on September 10 and will meet again on the 24<sup>th</sup>. They have not decided yet on those DCRs but hope to finish working through them next month. The working group is also forming a smaller task force for working on the door section in the single-level spec. Door experts are encouraged to volunteer for the task force.

Communications WG is continuing to work on the DTL specs to be included in the various equipment specifications. They are currently working on a version of the DTL specification for inclusion in the bi-level specification. This was just recently started and won't be complete for at least a few months.

The Materials WG will be restarting their meetings this month. The draft of the structural section for aluminum is nearly complete and the materials section will be mostly derivative from the requirements in the structural section so a draft will be easily assembled with a goal to finish the single car spec drafts by the end of November.

I have continued to meet weekly with the Technical Writer to work on the de-Amtraking the PRIIA specs.

Steve Hewitt asked if there was a timeframe for completing the de-Amtraking of the reference specs. Tammy said there was no specific timeframe as the progress is slow/tedious. The original documents are copies – not PDFs and cannot simply be updated via changes to the actual document.

Steve also asked about the anticipated timeline for the single level rail car specification updates to come before the technical subcommittee for a vote. Tammy emphasized that there are only 3 that have not been adjudicated and the mechanical working group is meeting regularly to resolve those 3 DCRs. The best guess is October 2024.

**9.  
Preview: Next FRA Presentation 9-26-24 –Melissa Shurland:**

The September FRA R&D presentation will be 9-26-24. The presentation info is below.

Presenter: Patricia Llana, Mechanical Engineer, Structures & Dynamics Division

**Title: Locomotive Crashworthiness Research Program**

The presentation will feature an overview of the Train Occupant Protection Research Program on crashworthiness. A series of tests were completed that successfully developed and verified a crash energy management system (CEM) that can be retrofit onto existing locomotives. Through extensive computer simulations validated by multiple full-scale dynamic impact tests, the program has demonstrated that employing CEM on locomotives greatly reduces the propensity for derailment and override, while absorbing collision energy in a controlled, predictable manner.

Steve Hewitt and Dan Ruppert will remind Executive Board members who are not a part of this subcommittee to feel free to join the meeting if available. Dan also invited industry members and state DOTs, as well as Amtrak and FRA, to invite others who may not normally participate on the subcommittee to attend to hear what should be an interesting and informative presentation. The bulk of the time for the 9-26-24 next meeting will be dedicated to the presentation and any follow-up discussion.

**10.  
Other/Adjourn – Dan Ruppert, Amtrak:**

With no other business forthcoming, Dan Ruppert adjourned today's meeting at 3:19pm Eastern.

**Next Tech Subcommittee meeting – 9-26-24**

**Decisions and Ongoing Action Items**

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**Steve will send the industry list out with today's minutes. Any updates or changes should be sent to Steve Hewitt at [shewitt109@aol.com](mailto:shewitt109@aol.com).**

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**Multi-State Venture Car procurement as of 9-12-24:**

*All coach type FDR and FAI stages are complete, including Cab Car and Café Car.*

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**Next Update: 9-26-24**

**Document Control Activities as of 8-15-24:**

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*I have continued to meet weekly with the Technical Writer to work on the de-Amtrakking the PRIIA specs.*

**Next Update: 10-10-24**

**Metro-North Dual Mode Locomotive Procurement as of 8-6-24 in a report to the NGEN Executive Board:**

Locomotives 301 and 302 are at Pueblo for type testing which is progressing well.

Locomotive 303 is in final assembly at the Siemens plant.

**Next Update: 9-26-24**

**Connecticut DOT Rail Car Procurement:**

**CtDOT Rail car Procurement as of 8-15-24 – provided by CtDOT:**

*We are still working through finalizing PDR, and have had an FAI of the engineer's seat.*

**Next Update: 9-26-24**

**Update: Amtrak Vehicle Procurements as of 9-12-24:**

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**Next Update: 10-10-24**

#### **FRA Rolling Stock Research Topics for monthly presentations:**

Melissa Shurland, FRA, provided an overview on FRA Rolling Stock Research potential topics for discussion on future NGENC Technical subcommittee calls. This list followed a discussion that Melissa Shurland and others from FRA R&D had with Steve Hewitt and Dan Ruppert.

1. *FRA Safety Approach for Review and Issuance of Letter of Concurrence for Use of Advanced On-Board Energy Storage Systems*
2. *Review of RDI-22 Rail Decarbonization Technology R&D*
3. *Glazing Research*
4. *Passenger Rail Equipment Crashworthiness (side Impact)*
5. *US-ISO Standards Group*
6. *WhMD (wheeled mobility device) Sled Test*

It was agreed that the first presentation will be on topic 1 (above) and will take place on 6-20-24. The FRA Office of Safety will give the presentation. Melissa Shurland will let Steve Hewitt know who the presenter will be prior to 6-20-24.

First Presentation was given on 6-20-24: "FRA's Requirements and Approval Procedures for New Technology Use in Rail Operations" – Dr. Phani Raj, FRA Office of Safety:

Dr. Raj gave an excellent presentation entitled "FRA's Requirements and Approval Procedures for New Technology Use in Rail Operations".

On 7-18-24, the second presentation was given by Melissa Shurland, FRA: "Rail Decarbonization: Overview of FRA Research on Advancing Clean Energy Technologies for Rail".

***The September FRA R&D presentation will be Sep 26, 2024. The presentation info is below.***

*Presenter: Patricia Llana, Mechanical Engineer, Structures & Dynamics Division*

***Title: Locomotive Crashworthiness Research Program***

*The presentation will feature an overview of the Train Occupant Protection Research Program on crashworthiness. A series of tests were completed that successfully developed and verified a crash energy management system (CEM) that can be retrofit onto existing locomotives. Through extensive computer simulations validated by multiple full-scale dynamic impact tests, the program has demonstrated that employing CEM on locomotives greatly reduces the propensity for derailment and override, while absorbing collision energy in a controlled, predictable manner.*

**Next presentation – 9-26-24**

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The CRISI Grant Application for funding the NGENC was submitted on time to the portal. It included many letters of support. Tim did not have the exact number, but it was a good representation. **It is not too late to send in support letters.** They should be sent to Tim Ziethen and Meghan Hestand, Amtrak Grants.

**Next Technical Subcommittee Meeting – 9-26-24**

**ATTACHMENTS**



*Our Vision: The NGEC will provide national leadership in standardization, acquisition, and management of passenger rail equipment.*

**PRIIA Section 305 Tech Sub Committee Meeting**  
**3:00PM Eastern**

## Microsoft Teams meeting

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**Agenda**

**FINAL**

**9-12-24**

- |                                                         |                 |
|---------------------------------------------------------|-----------------|
| 1. Roll Call                                            | Steve Hewitt    |
| 2. Review Action Items                                  | Steve Hewitt    |
| 3. Approve Minutes from 8-15-24 meeting                 | Dan Ruppert     |
| 4. Update: Multi State Venture Car Procurement          | Ryan Sharpe     |
| 5. Update: Metro-North Dual Mode Locomotive Procurement | Ray Hessinger   |
| 6. Update: Amtrak Vehicle Procurements                  | Dan Ruppert     |
| 7. Update: CtDOT Rail Car Procurement                   | Marci Petterson |
| 8. Document Control Update                              | Tammy Krause    |
| - Status - Single Level Specification Update            | Tammy Krause    |
| - Status – Working Group on Communications on Rail cars |                 |
| - Status – Working Group on Car body materials          |                 |
| - Status – De-Amtraking sub-(reference) specs           |                 |

9. Preview: Next FRA presentation – 9-26-24
10. Other
11. Adjourn

Melissa Shurland  
All  
Dan Ruppert

**Next Tech Subcommittee Meeting**  
**9-26-24**