



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

## NGEC Technical Subcommittee

MINUTES

AUGUST 15, 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> Dan Ruppert, Joe Paul, Melissa Shurland, Maria Hobbs, Curt Massie, Curtis McDowell, Ryan Sharpe, Art Peterson, Mike Jenkins, Sarah Hernandez, Patricia Liana, Tammy Krause, Blair Slaughter, Jennifer Bastian, Steve Hewitt <b>Industry Members:</b> Rich Stegner, Paul Jamieson, Ed Golitko, Kevin Sudano, David Wilcock, Fank Pazcazio, James Michel, Rich Bowie, Dick Bruss, Josh Coran, Stuart Trout, Norman Forde, Ray Ginnell, Jack Martinson, John Graham, Scott Meyer
<b>ABSENTEES</b>	<i>Matthew Simmons, Troy Hughes, Tarek Omar, Ray Hessinger, Marci Petterson, Barley Fields, Kevin Myles</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 confirmed the presence of a quorum.

**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 487 copies have been distributed.

**Maintaining Industry Participation List:**

There are currently around 200 industry participants. One new member added this week – Whitney Foughty, Cummins – welcome!

**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).**

**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](#).**

The exact times and further info will follow over the next few months.

**3.**

**Approval of the Minutes from 7-18-24:**

On a motion by Art Peterson for IDOT, and a second by Curtis McDowell for NCDOT, the minutes from 7-18-24 were approved as presented.

**4.**

**Update: Multi-State Venture Car procurement –Ryan Sharpe, Caltrans:**

Ryan Sharpe, Caltrans, provided the following update for inclusion in today's minutes:

*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 in work. The first café cars have been shipped to Chicago and are being prepared for revenue service.*

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

**5.**

**Update: Metro-North Dual Mode Locomotive – Steve Hewitt for Ray Hessinger, NYSDOT:**

Steve Hewitt read into the record the update provided to the Executive Board on 8-6-24.

Locomotives 300 and 301 are at Pueblo for type testing which is progressing well.

Locomotive 302 is in final assembly at the Siemens plant.

**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).

QPT 2 test runs, which are needed for revenue services, continue.

All in all, the project continues to progress and is "picking up steam"

On Airo:

This procurement is progressing well and is on schedule. There are 55 cars in production - 51 coach cars and 4 locomotives. A variety of FAIs are progressing – closing them down.

The intent is to have the first trainset on the corridor in the spring of 2025.

On the ALC 42:

Dan reported that they are progressing well with an average of 1-2 locomotives accepted per month.

Overall, this procurement is in a "steady state". FMI testing continues.

Because track time is needed for a variety of reasons there could be a slowdown – "stretch it out a little". Still, progressing well towards completing the initial 75 base order with the 50-option order after.

On the Long-Distance Trainsets:

Continues in the RFP process. It is moving along well with Amtrak working with carbuilders – with questions back and forth.

**7.**

**Update: CtDOT Rail Car Procurement – Steve Hewitt for Marci Petterson, CtDOT:**

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

**8.  
Document Control Update – Tammy Krause:**

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

*The Mechanical WG met on Aug 13 to review the DCRs proposed for the single-level specification. They have not decided yet on those DCRs but they have agreed to meet every two weeks to review and decide on the DCRs. During review the working group realized the door section in the single-level spec is not as detailed as the bi-level spec. It was decided that a smaller task force would review the two specs and update the door section in the single level spec. Door experts are encouraged to volunteer for the task force. The first meeting for the Door task force is tentatively set for August 20<sup>th</sup> at 2:30PM. The next Mechanical WG meeting is Aug 26 at 2:30PM EST.*

*The Communication on Rail Cars WG is continuing their work on the DTL specs to be included in the various equipment specifications. They have completed a version of the DTL spec for inclusion in the trainset spec, but holding off on submission until they see the final version for the single level spec as they are very similar. 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. Their next meeting is August 27.*

*The Materials WG has had a slow summer with little activity. However, 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. The plan is to start meetings back up in September 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.*

**9.  
Status: NGEC CRISI Grant Application and Support Letters – Steve Hewitt:**

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

CRISI Grant Awards are not expected to be announced until the October/November timeframe.

**Letters of Support:**

Submitting letters of support for the NGEC by members of the industry and states is most critical to the success of the application. It is extremely important that NGEC members – both states and industry – prepare and submit letters of support. **It is not too late to send in support letters.** Letters should be sent to Tim Ziethen and Meghan Hstand, Amtrak Grants, or they can be sent to Steve Hewitt who will send on to Amtrak.

**10.  
Scheduling next FRA presentation –Melissa Shurland:**

*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.*

**11.  
Other/Adjourn – Dan Ruppert, Amtrak:**

Steve Hewitt noted, since the Single Level Specification DCR review is not yet completed, and there will be no vote on those DCRs on the next meeting (8-29-24), the agenda will be light. Therefore, he suggested the 8-29-24 meeting be canceled and that there be two meetings in September.

Dan agreed, and Steve will send out the cancelation notice.

With no other business forthcoming, Dan Ruppert adjourned today's meeting at 3:20pm Eastern.

**Next Tech Subcommittee meeting – 9-12-24**

**Decisions and Ongoing Action Items**

**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 487 copies have been distributed.

**Maintaining Industry Participation List:**

There are currently around 200 industry participants. One new member added this week – Whitney Foughty, Cummins – welcome!

**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).**

**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](#).**

The exact times and further info will follow over the next few months.

**Multi-State Venture Car procurement as of 8-15-24:**

*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 in work. The first café cars have been shipped to Chicago and are being prepared for revenue service.*

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

**Next Update: 9-12-24**

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

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

*The Mechanical WG met on Aug 13 to review the DCRs proposed for the single-level specification. They have not decided yet on those DCRs but they have agreed to meet every two weeks to review and decide on the DCRs. During review the working group realized the door section in the single-level spec is not as detailed as the bi-level spec. It was decided that a smaller task force would review the two specs and update the door section in the single level spec. Door experts are encouraged to volunteer for the task force. The first meeting for the Door task force is tentatively set for August 20<sup>th</sup> at 2:30PM. The next Mechanical WG meeting is Aug 26 at 2:30PM EST.*

*The Communication on Rail Cars WG is continuing their work on the DTL specs to be included in the various equipment specifications. They have completed a version of the DTL spec for inclusion in the trainset spec, but holding off on submission until they see the final version for the single level spec as they are very similar. 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. Their next meeting is August 27.*

*The Materials WG has had a slow summer with little activity. However, 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. The plan is to start meetings back up in September 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.*

**Next Update: 9-12-24**

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

Locomotives 300 and 301 are at Pueblo for type testing which is progressing well.

Locomotive 302 is in final assembly at the Siemens plant.

**Next Update: 9-12-24**

**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: 9-12-24**

**Update: Amtrak Vehicle Procurements as of 8-15-24:**

On the new Acela:

Qualification testing continues. All parties are working well together (Amtrak, the OEM and FRA).

QPT 2 test runs, which are needed for revenue services, continue.

All in all, the project continues to progress and is "picking up steam"

On Airo:

This procurement is progressing well and is on schedule. There are 55 cars in production - 51 coach cars and 4 locomotives. A variety of FAIs are progressing – closing them down.

The intent is to have the first trainset on the corridor in the spring of 2025.

On the ALC 42:

Dan reported that they are progressing well with an average of 1-2 locomotives accepted per month.

Overall, this procurement is in a "steady state". FMI testing continues.

Because track time is needed for a variety of reasons there could be a slowdown – "stretch it out a little". Still, progressing well towards completing the initial 75 base order with the 50-option order after.

On the Long-Distance Trainsets:

Continues in the RFP process. It is moving along well with Amtrak working with carbuilders – with questions back and forth.

**Next Update: 9-12-24**

**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 NGEN 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 presentation will be provided to Steve Hewitt and distributed to all TSC members and will be also made available on the NGENC website.

**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**

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

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.

**Letters of Support:**

**Submitting letters of support for the NGENC by members of the industry and states is most critical to the success of the application. It is extremely important that NGENC members – both states and industry – prepare and submit letters of support.**

**2025 NGENC Annual Meeting:**

The 2025 Annual Meeting will be held in the afternoon on 1-30-25 at a new location: **Crystal City, VA at the [Renaissance Arlington Capital View](#)**. It will, once again, be held in conjunction with other rail meetings taking place throughout the week.

**Next Technical Subcommittee Meeting – 9-12-24**

**ATTACHMENTS**



***Our Vision: The NGENC 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

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 248 377 912 887

Passcode: tZDxGr

[Download Teams](#) | [Join on the web](#)

[Learn More](#) | [Meeting options](#)

---

**Agenda**

**FINAL**

**8-15-24**

- |   |                  |
|---|------------------|
| 1. Roll Call  | Steve Hewitt     |
| 2. Review Action Items                                    | Steve Hewitt     |
| 3. Approve Minutes from 7-18-24 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     |
| - Review of Single Level Specification Summary of Changes | Tammy Krause     |
| - Status – Working Group on Communications on Rail cars   |                  |
| - Status – Working Group on Car body materials            |                  |
| - Status/timeline– De-Amtraking sub-(reference) specs     |                  |
| 9. Status: NGEN CRISI Grant Application – support letters | Steve Hewitt     |
| 10. Schedule/Topic for next FRA presentation              | Melissa Shurland |
| 11. Other   | All              |
| 12. Adjourn   | Dan Ruppert      |

**Next Tech Subcommittee Meeting**

**9-12-24**