

SECTION 305 TECH SUB COMM

MINUTES

MARCH 17, 2022 3:00PM EASTERN

CONFERENCE CALL

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|--------------------|---|
| FACILITATOR | <i>Joe Paul, Vice Chair, NGENC Technical Subcommittee</i> |
| ATTENDEES | Core Team Members: Joe Paul for George Hull, Jeffrey Gordon, Ray Hessinger, Jennifer Bastian, Jennifer Bastian also as proxy for Gurleen Boparai, Curtis McDowell for Matthew Simmons, Ed Engle, Troy Hughes, Mike Jenkins, Blair Slaughter, Mike Murray, Larry Salci, Tammy Krause, Art Peterson, Steve Hewitt, Rebecca Anger Industry Members: Richard Curtis, Jack Madden, Josh Coran, Rich Stegner, Paul Arnone, Dick Bruss, Rich Bowie, James Campbell, Brian Ley, Darrell Smith, Kevin Sudano, Paul Jamieson, Ed Golitko, James michel, Steve Ojalvo, Dave Warner |
| ABSENTEES | <i>George Hull, Marci Petterson, Gurleen Boparai, Matthew Simmons, Jason Biggs, Mike Kraft, Melissa Shurland, Tarek Omar,</i> |

DISCUSSION/DECISIONS MADE

1.

Technical subcommittee Vice Chair Joe Paul, 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.

2.

Review Action Items – Steve Hewitt, NGENC Program Manager:

2022 NGENC Backgrounder educational document:

The 2022 NGENC two-pager is available in hard copy by request of Steve Hewitt at shewitt109@aol.com

Electronic two-pager was sent to all NGENC members last week.

Hard copies were distributed to all in-person attendees at the NGENC Annual Meeting.

To date 125 hard copies and 425 electronic copies have been distributed.

Maintaining Industry Participation List: There are just over 200 industry participants.

Any updates or changes to this list should be sent to Steve Hewitt at shewitt109@aol.com.

Connecticut DOT Rail Car Procurement:

This procurement remains in the “cone of silence” period.

3.

Approval of the Minutes from 2-3-22:

On a motion by Jennifer Bastian, Illinois DOT, and a second by Ed Engle, Iowa DOT, the minutes from 2-3-22 were approved as submitted.

4.

Annual Meeting Debrief – Joe Paul/Steve Hewitt:

Steve Hewitt reported that the 2022 Annual meeting – the first held as a hybrid - was one of the most well attended in the 12 years the NGENC has been active. There were 70 members in attendance in-person and 41 attending virtually.

A highlight of the meeting was Amit Bose, FRA Administrator, stopping by to address NGEC members. The Administrator mentioned that he had previously met with the NGEC Executive Board and that he wanted to stop by to re-emphasize the importance of the Committee and "all the work you have done over the years."

He noted that the recently passed Infrastructure Investment and Jobs Act (IIJA) has a lot of focus on Rail – Passenger and Freight.

He commented on the large equipment order by Amtrak that will hopefully get out soon.

He added that there is a lot of interest in the area of passenger rail and new equipment – mentioning that the Venture Cars are beginning to enter into service.

For the Administration – equipment manufacturing is an important part of the overall rail efforts. Per the Law – the key is US manufactured equipment.

He stressed the importance of a smooth procurement process as a highlight for OEM's and the suppliers. He added that there is an unprecedented opportunity presented to the industry, and on time and on budget is critical.

Administrator Bose emphasized that "the FRA is ready to work with you all" and that these efforts will benefit not only the industry but also the riders. He expressed his overall thanks to FRA staff and "to this Committee".

In the meeting there were presentations from the two NGEC standing subcommittees (technical and Finance and Administration), a Treasurer's report, Chairman's report, update presentations on the ongoing procurements and presentations on how the Charger Locomotives are performing. We also heard from Document control on the year's activities as well as a look ahead with a focus on the Chairman's priorities.

All of the presentations are available on the NGEC website or by request (shewitt109@aol.com).

The NGEC Executive Board and its officers were re-elected to new two year terms.

Overall, it was a great meeting! The feedback has been all positive. The flow of the meeting and the information provided has been widely complimented, and, of course one of the major highlights was the presence of Administrator Bose.

Joe Paul echoed Steve's sentiments about the meeting. He too, found it to be informative, well attended and well conducted. Joe expressed his thanks to Steve Hewitt for all his efforts to make it a successful meeting and for all his years of service to the NGEC.

Joe also noted that "it was great to see so many old faces and some new faces".

Steve Hewitt thanked Joe for his kind comments and also expressed his appreciation for Dave "PowerPoint" Warner's willingness to work the presentations throughout the meeting. Dave has volunteered his services for years to run the presentations and gives of his time to set them up in advance and help keep them flowing.

Thank you Dave!

5.

Update: Multi-State Railcar Procurement as of 3-17-22 – Jennifer Bastian, IDOT, for Gurleen Boparai, Caltrans:

Jennifer Bastian, on behalf of Gurleen Boparai, provided the following update:

The Cab Carshell final design has been approved and the cab structures are in production. Remaining Cab Car FDRs are in the final submittal and review stage. Cab Car Safety Appliance documents have been sent to the FRA for review, and the Cab Car Clearance information has been approved by Amtrak. IDOT Café Car FDRs are in the closure stage and Galley open items are being addressed.

The Cab Car Collision and Corner Post Appendix F testing is complete, and the test report has been submitted for review. The cab car compression test report review is complete, and Siemens is preparing responses. FAIs will continue for café and cab car subsystems.

103 cars are in production or have been produced at Siemens Sacramento Facility. Revenue Service relevant FMIs are in progress and open items are being addressed.

6.

Update: Metro-North Dual Mode Locomotive Procurement – Ray Hessinger:

Ray Hessinger reported that Metro-North and Siemens are wrapping up the Preliminary Design Review phase. He also noted that they shared with him a mock-up of the escape window on the locomotive something that has been a focus. Overall, they are moving forward and progressing well.

7.

Update: Amtrak Vehicle Procurements – Joe Paul:

On the Charger Locomotives: Amtrak has received 8 in Wilmington. 4 are in Wilmington for commissioning, and 2 locomotives are in service between Chicago and Seattle. The anticipated schedule is to deliver a couple of locomotives each month.

On the Acela: Some prototype testing is taking place.

On the Intercity Trainset – they continue with Design Review.

8.

Update: Document Control Management – Tammy Krause:

On 3-17-22, Tammy Krause provided the following update for inclusion in today's minutes:

Document Control has been working on the DMU Specification and it will be completed by the end of the month. I have put together a proposed timeline to accomplish the tasks for the TSC this year. The first item is the new revision of the Bi-Level specification. I will be reviewing all the DCRs that have been processed since 2016 for applicability to the Bi-Level specification. I also would like everyone to look at the current version and start thinking of any changes that you think should be made. I would like the WGs to be able to review all the Bi-Level DCRs at the same time. I have tried to arrange the timeline so that once the WGs are back to regular meetings, they will be able to continue them. I also would like you to review the proposed timeline and get back to me with any comments.

New Technical subcommittee industry participant, James Campbell, LOSSAN, asked where comments should go (to Steve or Tammy) on the Bi-Level car specification? Tammy responded that they should come to her. James asked about the DCR form and Tammy said she would provide him with the template.

9.

Update: Electronics on Trains Working Group – Tammy Krause

Tammy reported that this group still has not named a team leader following David Brabb's resignation due to his taking on a new employer. Tammy will check in on when the next meeting is and will let Steve Hewitt know the date and results.

10.

Update: Working Group on Weight Issues – Jeff Gordon, FRA:

Jeff Gordon, FRA, provided the following update for inclusion in the minutes:

The NGEV Vehicle Weight Working Group last met on March 3, 2022. Nine participants were in attendance.

Jeff had prepared a draft summary document to collect the items the working group had discussed to date which was distributed in advance for review.

We reviewed some of the topics including vehicle imbalance requirements and the potential for providing allowances for certain vehicle types such as café cars which have inherent imbalance challenges. The allowance is to be considered while continuing to observe requirements for protection against derailment, ride quality, clearance, and maintenance.

We discussed the specification requirements for determining P2 forces and will be reviewing those requirements in the context of the APTA Recommended Practice for Truck Design to ensure consistency between the NGEV specifications and that industry standard. The next meeting of the working group will be on April 6, 2022, at 11:00am ET.

12. Adjourn:

With no other business forthcoming on today's call, Joe Paul adjourned the meeting at about 3:26PM Eastern.

Next Tech subcommittee Call: 3-31-22– 3:00pm Eastern

Decisions and Action Items

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Maintaining Industry Participation List: There are about 200 industry participants.

There have been several updates/changes to the list that have been provided to Steve Hewitt and those changes were made. Any further updates or changes should be sent to Steve Hewitt at shewitt109@aol.com. Following the Annual meeting, the NGEC industry participants group added 4 new members. This shows the strong interest that continues to grow even after 12 years!

Update: Multi-State Railcar Procurement as of 3-17-22:

The Cab Car shell final design has been approved and the cab structures are in production. Remaining Cab Car FDRs are in the final submittal and review stage. Cab Car Safety Appliance documents have been sent to the FRA for review, and the Cab Car Clearance information has been approved by Amtrak. IDOT Café Car FDRs are in the closure stage and Galley open items are being addressed.

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Document Control Update -3-17-22:

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Update: Electronics on Trains Working Group – Tammy Krause

On 3-17-22, Tammy Krause reported that she has not been informed of who the working group's new team leader will be or when their next meeting will take place. Steve Hewitt asked Tammy to monitor the activities of this group and let him know of its progress.

Working Group on Weight Issues as of 3-17-22:

The NGEC Vehicle Weight Working Group last met on March 3, 2022. Nine participants were in attendance.

Jeff had prepared a draft summary document to collect the items the working group had discussed to date which was distributed in advance for review.

We reviewed some of the topics including vehicle imbalance requirements and the potential for providing allowances for certain vehicle types such as café cars which have inherent imbalance challenges. The allowance is to be considered while continuing to observe requirements for protection against derailment, ride quality, clearance, and maintenance.

We discussed the specification requirements for determining P2 forces and will be reviewing those requirements in the context of the APTA Recommended Practice for Truck Design to ensure consistency between the NGEC specifications and that industry standard. The next meeting of the working group will be on April 6, 2022, at 11:00am ET.

If interested in participating on this working group, contact Jeff Gordon at Jeffrey.gordon@dot.gov or Steve Hewitt at shewitt109@aol.com

Next Update – 4-14-21

University of Nebraska High Speed wireless study as of 2-3-22:

Hamid-Sharif Kashani provide the following update for inclusion in the minutes of the meeting:

We have been studying the properties and capabilities of the 160MHz RF band, and its suitability for different rail applications.

As a part of implementing a computer model for simulations of different sceneries for 160MHz, we have designed and implemented an end-to-end transceiver model and have also evaluated a number of path loss prediction models for use in our transceiver design.

Before the holidays, we focused our efforts on a single-carrier transceiver architecture. We completed that design effort and evaluated the design for its performance using several different channel models.

We are currently working on an OFDM-based transceiver architecture, and plan to conduct an evaluation of OFDM design as well. After this, we will have a complete model for different application evaluations.

Happy to provide detailed info about our models and our results.

For any questions or more information, please contact Hamid Sharif-Kashani at hamidSharif@UNL.edu.

Next Update: - as appropriate

Metro North Dual Mode Locomotive Procurement –3-17-22

Metro-North and Siemens are wrapping up the Preliminary Design Review phase. He also noted that they shared with him a mock-up of the escape window on the locomotive something that has been a focus. Overall, they are moving forward and progressing well.

Next Update: 4-14-22

Connecticut DOT Rail Car Procurement:

As of 3-17-22, this procurement remains in the “cone of silence” period.

Next Update: As appropriate

Amtrak Equipment Procurement as of 3-17-22:

On the Charger Locomotives: Amtrak has received 8 in Wilmington. There are 2 locomotives in service between Chicago and Seattle. The anticipated schedule is to deliver a couple of locomotives each month.

On the Acela: Some prototype testing is taking place.

On the Intercity Trainset – they continue with Design Review.

Next Update: 4-14-22

Next call 4-5-22

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

Web Ex video/audio information:

By Computer: <https://stephenhewitthewittconsulting.my.webex.com/meet/shewitt109>

by phone: 1-415-655-0001

Access code: 126-073-1531

3-17-22

The agenda for the meeting is below:

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|---|-----------------------|
| 1. Roll Call | Steve Hewitt |
| 2. Review Action Items | Steve Hewitt |
| 3. Approve Minutes from 2-3-22 | Joe Paul |
| 4. Annual meeting debrief | Joe Paul/Steve Hewitt |
| 5. Update: Multi-State Rail Car Procurement | Gurleen Boparai |
| 6. Update: Metro-North Dual Mode Locomotive Procurement | Ray Hessinger |
| 7. Update: Amtrak Vehicle Procurements | Joe Paul |
| 8. Document Control Management | Tammy Krause |
| Status Technical writing – finalizing DMU Revision A Timeline/work plan for 2022 | |
| 9. Update: Electronics on Trains Working Group | Tammy Krause |
| 10. Update: Working Group on Weight Issues | Jeff Gordon |
| 11. Other | All |
| 12. Adjourn | Joe Paul |

Next – meeting 3-31-22