

# SECTION 305 TECH SUB COMM

MINUTES

MARCH 31, 2022 3:00PM EASTERN

CONFERENCE CALL

<b>FACILITATOR</b>	George Hull, Chair, NGEC Technical Subcommittee
<b>ATTENDEES</b>	<b>Core Team Members:</b> George Hull, Jeffrey Gordon, Ray Hessinger, Art Peterson for Jennifer Bastian, Curtis McDowell for Matthew Simmons, Ed Engle, Mike Jenkins, Melissa Shurland, Tammy Krause, Steve Hewitt, <b>Industry Members:</b> Richard Stegner, Dick Bruss, Richard Curtis, Josh Coran, Paul Jamieson, Dave Warner, Paul Arnone, Kevin Myles, Kevin Sudano, Ed Golitko, Stephen Mark, Martin Bloedt, James Michel, Rich Bowie
<b>ABSENTEES</b>	Gurleen Boparai, Matthew Simmons, Joe Paul, Jennifer Bastian, Troy Hughes, Mike Kraft, Mike Murray, Tarek Omar, Rebecca Anger

## DISCUSSION/DECISIONS MADE

1.

Technical subcommittee Chair George Hull, 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).**

2.

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

**2022 NGEC Backgrounder educational document:**

The 2022 NGEC two-pager is available in hard copy by request of Steve Hewitt at [shewitt109@aol.com](mailto:shewitt109@aol.com)

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

Hard copies were distributed to all in-person attendees at the NGEC 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](mailto:shewitt109@aol.com).

**Connecticut DOT Rail Car Procurement:**

On 3-31-22, Marci Petterson, ConnDOT, reported that this procurement remains in the “cone of silence”.

**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](mailto:Jeffrey.gordon@dot.gov) or Steve Hewitt at [shewitt109@aol.com](mailto:shewitt109@aol.com)

**Next Update – 4-14-21**

**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**

**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**

**3. Approval of the Minutes from 3-17-22:**

On a motion by Curtis McDowell, for NCDOT and a second by Art Peterson, for IDOT, the minutes from 3-17-22 were approved as submitted.

**4. Update: Multi-State Railcar Procurement as of 3-31-22 – Gurleen Boparai, Caltrans:**

Gurleen Boparai, Caltrans, was not available for the call on 3-31-22 and did not provide an update in advance.

Art Peterson, for Illinois DOT, was on the call and did not have a formal update but did report that the cars were out of service currently with Caltrans and Siemens working on the technical issue. It is anticipated that they will be back in service in a week or so.

**5. Update: Document Control Management – Tammy Krause:**

On 3-31-22, Tammy Krause provided the following update for inclusion in today's minutes:

*Document Control has been working on the DMU Specification and it is almost done.*

*The next item is the new revision of the Bi-Level specification, which was last updated in 2016. 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.*

*I am going to send a new form to Steve Hewitt for proposed changes. Please, if everyone would look at the sections of the specification that they are interested in and start thinking about changes. I would like the Working Groups to be able to review all the Bi-Level changes at once.*

**6. Discussion: Addressing the issue of car body materials – George Hull:**

George Hull noted that there had been a discussion during the update of the DMU specification about the issue of alternate carbody materials. It was decided at that time that rather than try to take the issue on as a part of the update, it would be better taken up in more depth separate from a specific specification.

At the Annual Meeting 2-25-22, NGECC Chair Ray Hessinger identified this issue as one of his priorities for 2022.

On the NGEN Executive Board call on 3-22-22, Chairman Hessinger asked the Technical subcommittee to take it up and Tech subcommittee Chairman George Hull agreed to introduce it on the 3-31-22 Tech subcommittee call and have a discussion as to whether a special working group to address the issue should be established (similar to the weight issues working group) or if the subject matter should be taken up within the structural and mechanical permanent working groups.

Tammy Krause, on 3-31-22, recommended that this issue (carbody materials) would be better served in a temporary working group established for this specific subject matter rather than have it incorporated within the permanent working groups.

Jeff Gordon, FRA, agreed with Tammy Krause's recommendation and Ray Hessinger, NYSDOT also voiced his agreement.

With no objection or further discussion, George Hull established the Car Body Material working group and Tammy Krause was asked to organize it and schedule the first meeting. She will ask for volunteers to be a part of the working group and a volunteer to serve as team leader.

Tammy Krause agreed to "send an informational email to Steve Hewitt about the new Carbody Material Working Group and set up a meeting for around the 4-13-22<sup>n</sup> to get the group started".

**7.  
Update: Electronics on Trains Working Group – Tammy Krause**

Tammy Krause did not have an update on the Electronics on Trains Working Group. She agreed to reach out to Anand Prabhakaran, Sharma, and Associates, to see if Sharma still intended to name a team leader to fill the role previously held by David Brabb Associates.

**8.  
Update: University of Nebraska High -Speed Wireless Study – Hamid Sharif:**

On 3-31-22, Hamid Sharif provided the following update for inclusion in the meeting minutes:

Hamid Sharif – Update 3/31

*We have been investigating 160 MHz for rail applications. We have designed and implemented a detailed analytical and computer simulation model for 160 Mhz with the capabilities and constraints of this band. One of our objectives is to come up with a RF transceiver design for maximum end to end throughput. In doing so, we have gone through detailed channel models and parameters such as two ray ground reflection, path loss, Doppler effect, and other signal distortions to evaluate the performance of 160Mhz channel.*

*We have presented our findings in two papers with the following titles:*

- 1) Modeling and Performance Evaluation of an RF Transceiver System at 160 MHz for Railroad Environments*
- 2) Maximizing RF Communications Throughput for Railroad Applications at 160 MHz*

*These papers are accepted and will be presented at the 2022 Joint Rail Conference Railroad Engineering scheduled for April 20 – 21 - (<https://event.asme.org> > Joint-Rail-Conference).*

*For questions, please contact:  
Hamid Sharif  
hsharif@UNL.edu*

**9. Adjourn:**

With no other business forthcoming on today's call, George Hull adjourned the meeting at about 3:21PM Eastern.

**Next Tech subcommittee Call: 4-14-22– 3:00pm Eastern**

## Decisions and Action Items

### **2022 NGEC Backgrounder educational document:**

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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](mailto:shewitt109@aol.com).

### **Update: Multi-State Railcar Procurement as of 3-31-22:**

No formal update was provided – only that the new cars were temporarily out of service with the anticipation that they would be back in service within the next week or so.

### **Next Update – 4-14-22**

### **Document Control Update -3-31-22:**

On 3-31-22, Tammy Krause provided the following update for inclusion in today's minutes:

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### **Carbody Materials Working Group:**

On 3-31-22, it was decided that a working group would be established to address carbody materials. Tammy Krause will schedule a call – for around 4-13-22 to organize the group and to ask for a volunteer to serve as team leader.

### **Next Update – 4-14-22**

### **Update: Electronics on Trains Working Group – Tammy Krause**

On 3-31-22, Tammy Krause reported that she did not have an update on the Electronics on Trains Working Group. She agreed to reach out to Anand Prabhakaran, Sharma, and Associates, to see if Sharma still intended to name a team leader to fill the role previously held by David Brabb. Associates.

### **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.*

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APTA Recommended Practice for Truck Design to ensure consistency between the NGEN specifications and that industry standard. The next meeting of the working group will be on April 6, 2022, at 11:00am ET.

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**Next Update – 4-14-21**

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The following update was provided by Hamid Sharif on 3-31-22:

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*For questions, please contact:  
Hamid Sharif  
hsharif@UNL.edu*

**Next Update: - 4-28-22**

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

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**Next Update: 4-14-22**

**Connecticut DOT Rail Car Procurement:**

As of 3-31-22, 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.

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**Next Update: 4-14-22**

**Next call 4-14-22**

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

**3-31-2022**

The agenda for the meeting is below:

- |   |                      |
|---|----------------------|
| 1. Roll Call  | Steve Hewitt         |
| 2. Review Action Items  | Steve Hewitt         |
| 3. Approve Minutes from 3-17-22   | George Hull          |
| 4. Update: Multi-State Rail Car Procurement   | Gurleen Boparai      |
| 5. Document Control Management<br>Status – Technical writing – Finalizing Updated DMU Specification<br>Kick off – Bi-Level Specification Update | Tammy Krause         |
| 6. Discussion: Addressing the issue of car body materials   | George Hull          |
| 7. Update: Electronics on Trains Working Group  | Tammy Krause         |
| 8. Update: University of Nebraska High Speed Wireless Study   | Hamid Sharif-Kashani |
| 9. Other  | All                  |
| 10. Adjourn   | George Hull          |

**Next – meeting 4-14-22**