

SECTION 305 TECH SUB COMM

MINUTES

MARCH 22, 2018 3:00PM EASTERN

CONFERENCE CALL

FACILITATOR	Charles King, Chair, NGENC Technical Subcommittee
ATTENDEES	Core Team Members: Charlie King, Jeff Gordon, Allan Paul, Jennifer Bastian, Ray Hessinger, Jeff Schultz for Marci Petterson, Eric Curtit, , Phil Meraz, Jason Biggs, Michael Burshtin, Steve Hewitt, Curtis McDowell , Art Peterson, Christopher Witt, Andrew Wood, Larry Salci, Dave "Emeritus" Warner Industry Members: Darrell Smith, Richard Brilz, Josh Coran, Bill Slater, Donald Sandala, David Brabb, Tanner Buel, Ken Martin, Richard Curtis, James Michel, Martin Bloedt, Rich Stegner, Hamid Sharif, Tom Sisler, Al Bieber, Walt Stringer, Tom LaMano
ABSENTEES	George Hull, Momo Tamaoki, Charlie Poltenson, Marci Petterson, Melissa Shurland, Brian Marquis, Sal DeAngelo, Anand Prabhakaran, Tarek Omar, Tammy Krause

DISCUSSION/DECISIONS MADE

- 1.**
Technical subcommittee Chairman Charlie King, Amtrak, called today's meeting to order and asked Steve Hewitt to call the roll.

After calling the roll, the presence of a quorum was confirmed.

As always, industry participants are asked to email a notification of their attendance to Steve Hewitt at shewitt109@aol.com
- 2.**
Review of the Meeting Agenda - Steve Hewitt:

Steve Hewitt provided a brief overview of today's meeting agenda.
- 3.**
Review of Action Items that are not on the agenda – Steve Hewitt:

Steve Hewitt went on to review the open action items, providing a brief update on only those items that were not to be specifically covered on the agenda:

Maintaining Industry Participation List: Status: There are currently **245** registered industry participants. This past week we added 4 new members – welcome! The list has been updated with the information at hand, but it is important that members review the list and inform Steve Hewitt of any changes that he may not be aware of.

Requesting Backgrounder educational document: The new updated two-pager was released on 2-23-18 and is available electronically or by hard copy. For hard copies contact Steve Hewitt at shewitt109@aol.com with the number requested and an address to send them to.

Updating ECP Standards This is an ongoing item which the Technical subcommittee is tracking – it is anticipated that status updates will take place on every other call.

On 3-8-17, Paul Jamieson, who was unavailable for the call, provided the following update for inclusion in the minutes and to be read into the record by Steve Hewitt:

For the reporting period ending in January 2018, the ECP revenue service demonstration mileage is 557,546 ECP miles, 1,822,848 emulation (brake pipe operation) miles and total 2,390,394 miles. Currently, Amtrak is performing preventive maintenance and interior upgrades to the four coaches and cab car. This preventive maintenance and interior upgrades have resulted in a reduction of the ECP monthly mileage, but the other coaches remain in emulation revenue service demonstration.

The PRESS Mechanical ECP working group is working on completing the standards for voting by mid-2018. The NYAB and Wabtec annual equipment inspection reports are being prepared for FRA submittal. The CFR draft language is still

under FRA review. The project completion is scheduled for the end of 2018.

AWG/RVACC Update:

Melissa Shurland, provided a complete update on the RVAAC and AWG efforts at the NGEC Annual Meeting on 2-23-18. The presentation is available on the NGEC website at www.ngec305.org.

AAR TAG Committee on LED Headlights:

Next update 4 -5-18

DEF-UREA Implementation Update:

On 11-2-17, Jennifer Bastian, IDOT, provided the following update/DEF recap for inclusion in the minutes of the call:

- a) *Locomotives have been in operation in five different states and DEF supply contracts are in place.*
- b) *Amtrak has established processes for DEF procurement and handling.*
- c) *Midwest fill points are currently Chicago and Milwaukee. Truck based delivery is in place. Contracts are in place. Supply is going well, no problems reported.*
- d) *WSDOT supply chain is set up and ready to run.*
- e) *Fill point is set up in Oakland for Caltrans. The contracts are in place to add another fill point in LA. Caltrans has placed a storage container at the site in Oakland and is doing some initial research into a more permanent storage container/building.*
- f) *Plan is to gather usage data from the Chargers for next year and re-evaluate supply once we have more data.*

Next Update: On 3-22-18, Steve Hewitt asked Jennifer Bastian if she would be able to provide an update on DEF implementation on an upcoming subcommittee call. She agreed to do so.

4. Approval of the Minutes from 3-8-18 – Charlie King, Amtrak:

With a quorum having been confirmed, Charlie King called for a motion to approve the minutes from the 3-8-18 conference call:

A motion to approve was offered by Phil Meraz, Iowa DOT, and seconded by Jennifer Bastian, IDOT. With no objections or exceptions forthcoming, the minutes from the 3-8-18 conference call were considered approved as presented.

5. Update: Multi State Car Procurement – Momo Tamaoki, Caltrans:

Momo Tamaoki, Caltrans, provided the following update for inclusion in today's (3-22-18) minutes. Momo was unavailable for the call, but asked that the report and the following message be emphasized in the minutes:

"I will be flying from Chicago to Sacramento today and won't be able to call in to the NGEC technical subcommittee call. Please report the following railcar updates on my behalf. One thing I'd like to ask is can you please emphasize that the timing of the DCR approval is important to California and Illinois? There are a few DCRs that haven't had any movements since last year (I.e. Lateral imbalance). I understand that everyone is a volunteer, but if we don't get the approval from NGEC in a timely manner, we will not get approval from FRA to amend our grants. The final design reviews are taking place as we speak, and we need to pay our vendor soon.

*Thank you.
Momo*

- *The design review meeting took place on Chicago on March 20 & 21. The discussion topics included end doors for IDOT, wheelchair lift, diagnostics, seats and safety appliances. The meetings were productive, and a lot of action items were closed.*
- *Siemens visited Chicago Maintenance Facility on March 19. They took a facility tour, met with IDOT and Amtrak mechanical and operational staff to learn about the standard practices and tooling requirements in Illinois.*
- *The Mock up review is scheduled in the week of April 9 in Florida. We will be using Brightline's cars to review some of the components in the cars, such as toilet rooms, gangway, HVAC,*

communication system, etc.

- Caltrans has been developing and submitting Document Change Requests (DCR) to NGE. Caltrans has submitted 15 DCRs last week and awaiting approval from NGE. 12 out of those 15 items were HVAC related and three are related to Seat tracks, Door Operators, and Air Brake Control Valve. All DCRs have been sent to the appropriate working group(s) and discussion and votes are pending. "

6. Document Control Update – Michael Burshtin, Amtrak:

Michael prefaced his report by noting that he is looking into the issue raised by Momo regarding expediting DCRs. He is researching where things stand and will circle back with Momo.

Michael Burshtin, Amtrak, provided the following Document Control Update for inclusion in today's minutes (3-22-18):

We are concluding the Technical subcommittee dispositions of the three single-level Document Change Requests received earlier. The 15 single-level DCRs received on March 1 are currently being reviewed for disposition by their appropriate Technical subcommittees. Likewise, the 4 diesel-electric locomotive DCRs recently received are also being reviewed by their appropriate Technical subcommittees for disposition.

We anticipate additional single-level DCRs to be submitted soon, which leads me to an urgent request. We frankly need additional technical subcommittee volunteers to assist in the review and disposition of the many DCRs which are upcoming. We also need to sometimes broaden the outlook and viewpoint of our reviews, as we have been doing this PRIIA technical specification work for many years, and fresh ideas and viewpoints are always welcome. The need for assistance is currently greatest for both our Mechanical technical working group, headed by Jeff Gordon (Jeffrey.Gordon@dot.gov), and the Electrical technical working group, headed by Tammy Krause (tkrauser@gmail.com). I ask all our PRIIA members with capabilities in either of these two areas, especially our more recent members who may not have been aware of this opportunity, to please consider joining one of our subcommittees. If interested, please send an e-mail message directly to Jeff or Tammy.

Jeff Gordon added that the Mechanical Working Group membership right now is small and needs additional members. It also needs members that can provide a broader perspective.

Charlie King emphasized the importance of volunteering for the technical working groups and encouraged members of the subcommittee to become engaged in these groups. Feel free to contact Charlie King, Michael Burshtin or Tammy Krause if you have any questions.

7. Updating a spec with approved changes for other specs – process/schedule – Tammy Krause:

Tammy was unavailable, but provided the following report which Steve Hewitt read into the record:

I have been asked several times if changes made to one specification affect the others, and the answer is yes. All approved DCRs are looked at to determine if the change applies elsewhere. For example, the single level specification is currently Revision A. There were 144 changes made from the initial release to Revision A and these came primarily from DCRs that were approved for the Bi-Level specification. This is an on-going process for all the specifications. As you know, we tried to standardize all the PRIIA specifications where it made sense. Some chapters, such as References & Glossary, Project Management, Material & Workmanship, to name a few, are standard among all the PRIIA Equipment Specifications, whether a Car or Locomotive. There are others that are the same across the cars. That is why it is important that we continue to make sure that all changes to a specification are also made wherever else they may apply.

I would also like to mention that since the Electrical Group has not needed to have any meetings in years, I would like anybody interested in participating in the Electrical Group to send me an email. Even if you were involved before, please send me an email. My email will be in the notes of this meeting. TLKrauseRR@gmail.com

The Diesel Electric Locomotive is currently being recompiled to Revision B. I am working with Camren, our tech writer and we anticipate completing this by April 5, the next meeting.

8. Progress Report – Electronics on Trains Working Group – Tom Sisler:

Working Group Chair, Tom Sisler, reported that he has been busy recently with travel and project work and had to cancel the last two meetings of this group. The next meeting will take place next week, and Tammy Krause,

SNC-Lavalin, has agreed to provide support.

9.

Presentation: University of Nebraska High Speed Wireless Project – Hamid Sharif, University of Nebraska:

Hamid Sharif, University of Nebraska-Lincoln, provided a presentation on the University's project related to high-speed wireless architecture and train technology. On today's call, Hamid walked through a PowerPoint presentation on the projects. All Technical subcommittees were provided with the presentation in advance of the call. The basic outline of the project was provided previously to frame the discussion:

The Advanced Telecommunications Engineering Laboratory at the University of Nebraska-Lincoln has been investigating different high-speed wireless architecture and technologies under the direction and support of the FRA for the following objectives:

- *Provide an independent in-depth study for reliable, high performance, interoperable, cost-effective and advanced wireless systems for the current and the next generation of high-speed trains.*
- *An independent performance evaluation of the existing wireless technologies for the rail industry if the current technologies were to be used for high-speed passenger trains in the next decade.*
- *Investigate the system requirements for integration of wireless communication networks to support reliable transmissions of train control signals as well as providing high capacity wireless connectivity for passengers on board of current and high-speed trains for the next decade, including a roadmap towards defining a successful WiDTL system.*
- *Provides a computer simulation model for rail industry to evaluate different wireless data traffic and interference scenarios for current and the next generation of high-speed passenger trains.*
- *Identify the technical issues which impact reliability of train control information transmissions wirelessly with the co-existence of other wireless networks.*

Hamid prefaced his remarks by noting that the University's role is to provide the NGEN group with assistance on technical issues related to high-speed wireless and to develop modeling tools. Their purpose is not to suggest a direction. They hope to provide technical support for the subcommittee members for decisions a member or agency may need to make. He noted that "the FRA uses us in that role as well".

Following the presentation, Charlie King raised several points regarding in-seat entertainment and the Amtrak CEOs' intent to follow a similar direction as the airlines have implemented which is to remove seat back screens and communications in favor of personal devices (I-Pad, I-phones etc).

Charlie also mention PTC and the "large pipe of information needed to maintain demands on the spectrum" which will be huge.

Hamid agreed that these were good points and exactly the kinds of things they need to hear about. Their intent is to create a tool that can add and subtract elements.

Charlie asked Steve Hewitt to keep this item on the docket, so we continue the interaction.

Hamid also offered to spend time off-line with any interested members.

Allan Paul, NCDOT, commented that "we are operating at 4G now and would like to talk to you". Allan will have his lead technician contact Hamid.

Contact Information:

Hamid Sharif
Phone: 402-554-3628
Email: hsharif@unl.edu

10.

Other Issues:

Ray Hessinger, NYSDOT, reminded members that Metro-North is beginning its procurement process for the Dual-Mode Locomotives and has advertised for a pre-bid meeting for interested builders. The meeting will take place in NYC on 3-28-18.

It was agreed that this procurement will be carried as an open action item and when there are activities to be

reported, Ray and/or Metro-North will provide an update.

With no other business forthcoming for today's call, Charlie King adjourned the meeting at 3:57pm Eastern.

Next Call: 4-19-2018 – 3:00pm Eastern

Decisions and Action Items

Updating ECP Standards This is an ongoing item which the Technical subcommittee is tracking – it is anticipated that status updates will take place on every other call.

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3-22-18 – Nothing new to report

AWG/RVACC Update:

On 2-23-18, Melissa provided an update on the FRA/OSU project. She also provided a complete update on the RVAAC effort at the NGEN Annual Meeting on 2-23-18. The presentation is available at www.ngec305.org

3-22-18 – Nothing new to report.

Requesting Background educational document: The new updated two-pager was released on 2-23-18 and is available electronically or by hard copy. For hard copies contact Steve Hewitt at shewitt109@aol.com with the number requested and an address to send them to.

Maintaining Industry Participation List: Status: There are currently **245** registered industry participants. Members are asked to review the industry member list and send any corrections – additions – deletions to Steve Hewitt.

AAR TAG Committee on LED Headlights:

Next update: 4-5-18

Procurement Update:

Multi-State Car Procurement - Caltrans (Lead State): Progress reports from the lead state will be provided on each subcommittee call. See agenda item 6, above, for today's update (3-22-18).

Michael Burshtin, Amtrak, provided the following Document Control Update for inclusion in today's minutes (3-22-18):

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PRIIA technical specification work for many years, and fresh ideas and viewpoints are always welcome. The need for assistance is currently greatest for both our Mechanical technical working group, headed by Jeff Gordon (Jeffrey.Gordon@dot.gov), and the Electrical technical working group, headed by Tammy Krause (tkrauserr@gmail.com). I ask all our PRIIA members with capabilities in either of these two areas, especially our more recent members who may not have been aware of this opportunity, to please consider joining one of our subcommittees. If interested, please send an e-mail message directly to Jeff or Tammy.

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Electronics on Trains Working Group:

Next update 4-5-18

DEF-UREA Update: On 10-5-17, Mario Bergeron suggested that it was time to get an update on the DEF-UREA as it has been a while and it would be good to hear how the implementation is going.

On 11-2-17, Jennifer Bastian, IDOT, provided the following update/DEF recap for inclusion in the minutes of the call:

- a) Locomotives have been in operation in five different states and DEF supply contracts are in place
- b) Amtrak has established processes for DEF procurement and handling.
- c) Midwest fill points are currently Chicago and Milwaukee. Truck based delivery is in place. Contracts are in place. Supply is going well, no problems reported.
- d) WSDOT supply chain is set up and ready to run.
- e) Fill point is set up in Oakland for Caltrans. The contracts are in place to add another fill point in LA. Caltrans has placed a storage container at the site in Oakland and is doing some initial research into a more permanent storage container/building.
- f) Plan is to gather usage data from the Chargers for next year and re-evaluate supply once we have more data.

Next update 4-5 or 4-19-18

University of Nebraska presentation on High Speed wireless technology:

Hamid Sharif, from the University of Nebraska gave an overview of the project on 3-22-18 and is available to members off line as well. This item will remain "on the docket" with periodic updates.

Contact Information:

Hamid Sharif
Phone: 402-554-3628
Email: hsharif@unl.edu

Metro North Dual Mode Locomotive Procurement:

Metro-North is beginning its procurement process for the Dual-Mode Locomotives and has advertised for a pre-bid

meeting for interested builders. The meeting will take place in NYC on 3-28-18.

It was agreed that this procurement will be carried as an open action item and when there are activities to be reported, Ray and/or Metro-North will provide an update.

Next call: 4-5-18

Call in number is:

888 585-9008 access #: 559-120-127

ATTACHMENTS

Next Generation
Equipment Committee



The NGEC will provide national leadership in standardization, acquisition, financing and management of passenger rail equipment.

PRIIA Section 305 Tech Sub Committee Meeting

March 22, 2018

The agenda for the meeting is below:

- | | |
|---|------------------|
| 1. Roll Call | Steve Hewitt |
| 2. Review Meeting Agenda | Charles King |
| 3. Review Action Items | Steve Hewitt |
| 4. Approve Minutes from 3-8-18 | Charles King |
| 5. Update: Multi-State Rail Car Procurement | Momo Tamaoki |
| 6. Document Control Update | Michael Burshtin |
| 7. Updating a spec with approved changes for other specs – process/schedule | Tammy Krause |
| 8. Progress Report: Electronics on Trains Working Group | Tom Sisler |
| 9. Presentation: University of Nebraska High Speed Wireless Project | Hamid Sharif |
| 10. Other issues | All |
| 11. Review this meeting: | Steve Hewitt |
| a) Decisions | |
| b) New Action Items | |

***Technical Sub Committee Conference Call Meeting:
Thursday 3-22 -18 / 3:00pm Eastern / 1-888 585-9008 / passcode 559-120-127#***

*Please call in a few minutes early so all is in attendance for Roll Call.
Thank you
Next Call -4-5-18 at 3:00pm Eastern*