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

Section 305 Next Generation Corridor Equipment Pool Committee (NGEC)

Monthly Activities Report: June 30, 2024

Submitted By: Steven J Hewitt, Program Manager, S305 NGEC

Public law 110-432 required Amtrak to:

...establish a Next Generation Corridor Equipment Pool Committee, comprised of representatives of Amtrak, the Federal Railroad Administration, host freight railroad companies, passenger railroad equipment manufacturers, interested States, and as appropriate, other passenger railroad operators.

"The purpose of the Committee shall be to design, develop specifications for, and procure standardized next-generation corridor equipment.

(b) Functions – the Committee may –

- 1) Determine the number of different types of equipment required, considering variations in operational needs and corridor infrastructure.*
- 2) Establish a pool of equipment to be used on corridor routes funded by participating states; and*
- 3) Subject agreements between Amtrak and States, utilize services provided by Amtrak to design, maintain and remanufacture equipment."*

Executive Board

Chair: Ray Hessinger, NYSDOT

Vice Chair: Dan Ruppert, Amtrak

Secretary: Amanda Martin, Iowa DOT

Treasurer: Tim Ziethen, Amtrak

The Executive Board will hold web- conference calls every 4 weeks on – Tuesdays at 11:30am Eastern.

During the month of June 2024, the Executive Board met once – on 6-11-24.

Highlights, decisions, updates from the NGEC during the month of May 2024:

- Treasurer's Report and status update on NGEC Funding:

Balance/Spend Rate Through March 2024

Total Invoiced/Incurred (Including Carryover) - \$88,927.06

Forecast/Accrual Amount to Reflect Billing Lag 60 days - \$30,000.

Invoiced + Accrual Expenses to date (through March) – 118,927.06

Amtrak AOP Funding - \$260,000

Remaining funds (total available less Invoiced + Accrual) - \$141,072.94.

Estimated full year (YTD Incl. Carry Over + FC + Remaining Months @ Avg Spend TD) - \$173,191.33.

Current Average Monthly Spend - \$13,566.07

Strat Cavros reported that invoiced expenses for April came in at \$13,990. The invoice will be forthcoming soon to Amtrak.

Status – Completing Prior Grant Close Out documents:

The due date for submittal to FRA is August 2024, but Tim Ziethen anticipates finalizing and sending the documents to FRA earlier than that.

New CRISI Grant Application:

The CRISI Grant Application for funding the NGEC 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 Histan, Amtrak Grants.

Tim commented that Steve Hewitt was instrumental in helping to update the metrics and provide additional information for the application. Tim worked with Amtrak Grants and it was finalized and submitted to the portal.

Other potential funding opportunities:

On 6-11-24, Tim Ziethen reported that there is nothing new to add on potential funding options and reiterated that there is no perfect other option. He reminded members that the current funding from the Amtrak AOP was never meant to be ongoing – there needs to be a more permanent solution. As of now, the best option seems to be to seek a CRISI Grant.

Second Quarterly Progress Report (QPR) under current funding source – due (internally) 7-31-24:

Steve Hewitt will prepare the milestones narrative as a part of the June monthly activities report. Tim will complete the other sections and the report will be distributed internally by 7-31-24.

By-Laws Annual Review:

The 2023 review resulted in no changes being recommended – and that decision was noted on the By-Laws that were distributed and posted to the website. The By-Laws will next be reviewed by the FASC in the Fall of 2024. In July – the FASC will begin the process and set the timeline - with the intent of presenting any potential changes to the Executive Board by November 2024.

NGEC two-pager updates for 2024:

The NGEC 2024 Backgrounder and Educational document has been released and remains available by request from Steve Hewitt @ shewitt109@aol.com.

As of 6-30-24, 463 copies have been distributed (hard copies and electronic). The document is also available on the NGEC website.

In July, the FASC will set a timeline and begin the process for developing the 2025 version of the two-pager.

- Metro-North Dual Mode Locomotive Procurement:

As reported on 6-20-24 to the NGEC technical subcommittee:

Siemens is continuing type testing on a variety of components.

A big milestone was reached in May with Locomotives #301 and #302 having been shipped from Siemens to Pueblo for continued type testing.

- Multi-State Venture Rail Car Procurement as reported by Caltrans on 6-20-24 to the Technical Subcommittee:

All coach type FDR stages are complete, including Cab Car and Café Car. The Cab Car and Café Car MCAT simulation reports have been approved by the states and the FRA.

The Cab Car Complete FAI and FRA sample car inspections are complete. The Cab Car 238.111(b) test plan has been submitted to FRA and the 238 consist has completed all clearance and trainline testing and is now awaiting a window for corridor testing.

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.

- Amtrak Equipment Procurement Update as reported on 6-20-24 to the technical subcommittee:

On the new Acela:

Stage 1 testing continues and work continues on qualification for revenue service.

On the Airo Trainsets:

Progress continues to go well. There are 48 in production – 44 coach cars and 4 locomotives. Testing is going well and “progressing nicely”.

On the ALC42:

53 have now been accepted into service and several are in transit with seven currently in production. No real significant issues. Things are proceeding on a nice steady pace.

On the Long-Distance Fleet:

This is an open procurement and not a lot can be shared at this point. Some dates have been shuffled and they are working with the vendors and car suppliers. Progressing well over all.

- Connecticut DOT Rail Car Procurement as reported to the technical subcommittee on 5-23-24:

We are working with Alstom to close out open items from PDR. The proposed truck design needed modification, due to some tight clearances. We believe that we now have sufficient clearance info to proceed on the truck design.

Please ask the NGEC members if they have input that they can provide on their experience with King Air from China HVAC systems to please email me.

There was no update provided in June 2024.

- VIA Rail Equipment Procurements:

A detailed update presentation was provided to the NGEC during the Annual Meeting on 2-2-24.

The presentation is posted in the Meetings section of the website at www.ngec.org

- Document Control Update as reported to the technical subcommittee on 6-20-24:

The next revision of the Single Level Specification has 131 proposed changes. Of these DCRs, 114 of them came from the Bi-Level Specification Revision D that was completed in February of last year, and 14 are from the Trainset Revision B that was completed in October of 2019. There are 3 DCRs that are new. The Leaders of the Mechanical, Interiors, Electrical and VTI Working Groups have received the DCRs for their respective areas. The master list of DCRs will be sent to the entire TSC at the end of next week.

I have received no DCRs for the Dual Mode Locomotive. Can someone please send me the latest version of the specification that was used by Metro North to purchase Dual Modes and I will use that to create DCRs.

I continue to meet with the Technical Writer to review the PRIIA Subspecifications for De-Amtraking.

- Filling Vacancies:

Vacancies exist on the Specification Review Panels

Current status as of 6-30-24:

As of 6-30-24, the only remaining vacancies are all slated for Caltrans. Steve Hewitt has had several email conversations with Kyle Gradinger, Caltrans, regarding the vacancies. Caltrans wishes to remain on the Panels but has yet to determine who will serve.

Consultants/ Technical Support to the Review Panels:

Review Panel Consultant – Larry Salci
NGEC Support – Steve Hewitt
Technical Support – Tammy Krause
Amtrak Technical Support – Mike Kraft

Bi-Level Car Review Panel:

Ray Hessinger, NYSDOT – Chair
Vacant Caltrans
Amanda Martin, Iowa DOT
Melissa Shurland, FRA

Locomotive Review Panel:

Ray Hessinger, NYSDOT – Chair
Vacant Caltrans
Melina Lopez, IDOT
Jason Biggs, Washington State DOT
Melissa Shurland, FRA

Trainset Review Panel:

Ray Hessinger, NYSDOT – Chair
Maria Hobbs, Iowa DOT
Jason Biggs, Washington State DOT
Vacant Caltrans
Melissa Shurland, FRA

Single Level Rail Car Review Panel:

Ray Hessinger, NYSDOT -- Chair
Maria Hobbs, Iowa DOT
Jason Biggs, WSDOT
Vacant Caltrans
Melissa Shurland, FRA

DMU Review Panel Members:

Ray Hessinger, NYSDOT -- Chair
Melissa Shurland, FRA
Brian Beeler, for Maine DOT
Vacant - Caltrans

- NGEC website issues:

As of 6-30-24, AASHTO has about completed its efforts to re-post all of the information that was lost when AASHTO had a cyber-attack which affected its website and the NGEC's as well. Steve Hewitt has been providing information for the uploads as needed.

- 2025 NGEC 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.

- Technical Subcommittee/FRA research topic presentations:

On 6-20-24, Dr. Phani Raj, FRA Office of Safety presented: "FRA's Requirements and Approval Procedures for New Technology Use in Rail Operations" to the technical subcommittee.

The order of the other items on the FRA list will be determined based on FRA staff availability. The intent is to have one topic covered each month.

For Executive Board members not on the Technical subcommittee please feel free to attend whatever presentations you are interested in. Let Steve Hewitt know if you want to attend a particular meeting and he will send a meeting invite.

Technical subcommittee

Chair: Don Ruppert, Amtrak

Vice Chair: Joe Paul, Amtrak

During the month of June 2024, the subcommittee met twice – on the 6^h and 20th:

Key decisions and action item updates from the month of June 2024, included:

- Backgrounder educational document:

The 2024 NGEC two-page educational was released on 2-2-24 at the NGEC Annual Meeting. As of 6-30-24, 463 copies have been distributed. The document is available in electronic or hard copy versions. Requests should be sent to Steve Hewitt at shewitt109@aol.com

- Document Control Update as of 6-30-24:

See the update in the Executive Board section of this report.

- Multi-State Car Procurement - Caltrans (Lead State) update as of 6-30-24

See Executive Board section of this report for the status of the Venture car multi- state procurement.

- Metro North Dual Mode Locomotive Procurement as of 6-30-24:

See the Executive Board section of this report for the status of this procurement.

- Amtrak Equipment Procurement Updates as of 6-30-24:

See the Executive Board section of this report for the status of this procurement.

- Connecticut DOT Rail Car Procurement as of 6-30-24:

See the Executive Board section of this report for the status of this procurement.

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

On 6-20-24, Dr. Phani Raj, FRA Office of Safety, kicked off the first in a series of FRA presentations to be given on different topics related to areas of technology research related to Rail rolling stock. These presentations will be given monthly, schedule permitting.

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

The presentation will be available on the NGEC website and will be distributed with the 6-20-24 DRAFT minutes.

Next presentation – 9-5-24

- NGEC future funding – CRISI Grant Application:

See the Executive Board section of this report for the status of this procurement.

- NGEC Website Recovery:

AASHTO has about completed its efforts to re-post all of the information that was lost when AASHTO had a cyber-attack which affected its website and the NGEC's as well. Steve Hewitt has been providing information for the uploads as needed.

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- 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. 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 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.

The Finance and Administrative Subcommittee

Chair: Tim Ziethen, Amtrak

Vice Chair: Brian Beeler II, NNEPRA for Maine DOT

Second Vice Chair: Amanda Martin, Iowa DOT

The Finance and Administrative subcommittee (FASC) will hold a conference call every four weeks on Wednesdays at 3:00pm Eastern.

During the Month Of June 2024, the Finance and Administrative Subcommittee did not meet as the Chair and NGENC Manager made the determination that the agenda was not strong enough to warrant a meeting. This is per the protocols established by the Executive Board in 2023.

Status of ongoing items:

- Balance/Spend Rate Through March 2024

Total Invoiced/Incurred (Including Carryover) - \$88,927.06
 Forecast/Accrual Amount to Reflect Billing Lag 60 days - \$30,000.
 Invoiced + Accrual Expenses to date (through March) – 118,927.06
 Amtrak AOP Funding - \$260,000
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The By-Laws will next be reviewed by the FASC in the Fall of 2024. In July – the FASC will begin the process and set the timeline - with the intent of presenting any potential changes to the Executive Board by November 2024.

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In July, the FASC will set a timeline and begin the process for developing the 2025 version of the two-pager.

NGEC Specification Review Panel(s):

For each PRIIA NGEC specification a Review Panel has been established to compare the specification (as developed by the technical subcommittee) against a Requirements document previously adopted by the Executive Board. As the Review Panel completes its work, it prepares a report with recommendations. This report is submitted to the Executive Board for its consideration. Once accepted by the Board, the specification is subsequently formally adopted by the Executive Board. As part of the Document Control process, any proposed revisions to a PRIIA NGEC specification must go through the Review Panel process as well. At such times, the Review Panel, previously established for a specification, is re-convened by the Executive Board chair.

The NGEC Review Panels did not meet in June 2024. Several vacancies are yet to be filled by Caltrans as noted previously in this report.

Milestones – Quarterly update (4-1-24 through 6-30-24)

Monthly meetings:

Throughout the quarter, the NGEC Executive Board and the FASC held meetings every 4 weeks as agreed to in 2023.

Bi-weekly meetings:

The Technical subcommittee holds bi-weekly calls except when it is deemed by the chair and the NGEC Manager that there is not a strong enough agenda for a particular meeting and it is then canceled.

All business of the Board, the Technical subcommittee and the Finance and Administration subcommittee continued to progress throughout the quarter.

Dissemination of educational/informational pieces and “getting the message out”:

The 2024 two-page educational/backgrounder was released in February 2024. To date, 463 hard and soft versions have been distributed to NGEC members and various associations.

The NGEC website is up and running at www.ngec.org.

Updates and/or changes are provided to AASHTO by the NGEC Manager periodically.

Note: During the quarter, AASHTO (which maintains the NGEC website) experienced a cyber attack which impacted its own website and that of the NGEC. AASHTO has about completed its efforts to re-post all of the information that was lost. Steve Hewitt has been providing information for the uploads as needed.

NGEC Annual Meeting:

As reported previously, the (14th) Annual Meeting of the NGEC took place in-person and virtually on 2-2-24 and was the NGEC’s third Hybrid meeting. The meeting was attended by approximately 94-100 members.

This quarter, it was announced that 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.

Annual Review of NGEC By-Laws and Operating Procedures:

The 2023 Annual review of the NGEC By-Laws was completed in October 2023 and there were no edits or changes recommended.

In the Fall of 2024, the required annual review will again begin with the FASC with recommendations to be made to the Executive Board no later than 10-31-24.

Quarterly Reports:

Grant Reports will continue, but will be internal only, as the current funding source is the Amtrak AOP for FY 2024. Information provided in the monthly NGEC Activities reports for the quarter, prepared by the NGEC Manager, will be utilized as a basis for the Quarterly Reports to the FRA.

The first quarterly report for FFY 2024 for the period covering 10-1-23 through 12-31-23 was completed and distributed by 1-31-24.

The second quarterly report for the period beginning on 1-1-24 through 3-31-24, was completed by 4-30-24.

The third quarterly report for the period beginning on 4-1-24 through 6-30-24 will be completed and distributed internally to Amtrak, FRA and the NGEC Executive Board by 7-31-24.

Fiscal and contractual actions:

The Amtrak Board of Directors approved an appropriation for \$260,000 from its AOP as interim funding with long-term funding to be yet to be identified. In 2023, Amtrak applied for a CRISI Grant for the NGEC but it was not awarded.

A NOFO for the next round of CRISI grants was issued on 3-28-24. Amtrak grants, with NGEC input, submitted a new application for CRISI funds for the NGEC. It is anticipated that CRISI awards will be announced in the October/November timeframe.

Review/Update of NGEC Specifications (Document Control):

This activity is ongoing.

Activities specific to this quarter:

The working group on weight issues continues to re-work its proposed specification since there were several DCRs offered from industry members and Amtrak in January 2024. This work will likely be completed in the fourth quarter of FY 24.

Updating the Single Level Rail Car Specification is under way with 131 DCRS being considered. During this quarter, most working groups completed their review. The Mechanical working group has not yet completed its review of several DCRs. The group will meet on August 18th and it is anticipated that the update to the Single level rail car specification will be completed in the fourth quarter FY24.

On-Going Activities – status updates this quarter:

The 2023 By-Law Review was completed and FASC recommendations for no changes this year was accepted by the Executive Board. The next annual review will take place in the Fall of 2024.

The website continues at www.ngec.org. Updates and new information are submitted regularly by Steve Hewitt to AASHTO for posting.

The CRISI Grant application for the current round of funding has been submitted with awards expected to be announced in the October/November timeframe.

In the 1st quarter of FY 24, the NGEC began to operate under the 12-month budget of \$260,000 funded by Amtrak through its 2024 AOP.

In the first quarters of FY24, the appropriate Technical working groups continued to review the Dual Mode Locomotive Specification and the Single Level Rail Car Specification. The Single Level Rail Car Specification is expected to be completed by the end of the fourth quarter 2024. The Dual Mode Locomotive review will begin once Metro-North has provided the NGEC with final specification changes made to the base spec during its procurement.

- In the third quarter 2024, the Technical subcommittee established a schedule with FRA to provide monthly presentations to the subcommittee on FRA Rolling Stock Research Topics for monthly presentations on the following:

FRA Safety Approach for Review and Issuance of Letter of Concurrence for Use of Advanced On-Board Energy Storage Systems

Review of RDI-22 Rail Decarbonization Technology R&D

Glazing Research

Passenger Rail Equipment Crashworthiness (side Impact)

US-ISO Standards Group

WhMD (wheeled mobility device) Sled Test

The first presentation took place on 6-20-24 and was titled "FRA's Requirements and Approval Procedures for New Technology Use in Rail Operations". Dr. Phani Raj, FRA Office of Safety was the presenter.

The second presentation will be given on 9-12-24 by Melissa Shurland, FRA. The topic will be "Rail Decarbonization: Overview of FRA Research on Advancing Clean Energy Technologies for Rail".