



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

Section 305 Next Generation Corridor Equipment Pool Committee (NGEC)

Monthly Activities Report: September 30, 2022

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: George Hull, Amtrak

Secretary: John Oimoen, IDOT

Treasurer: Tim Ziethen, Amtrak

The Executive Board holds bi-weekly conference calls – Tuesdays at 11:30am Eastern

During the month of September 2022, the Executive Board met once – on the 6th.

Highlights, decisions, and action items from the month of September 2022 include:

- Treasurer's Report and Finance and Administrative Sub-committee as of 9-14-22:

Balance/ Spend Rate:

- Total Initial Grant Amount: \$1,250,000.
- Expenses Incurred through June 2022: \$1,017,901.39
- Balance remaining: \$ 232,098.61
- Current Spend Rate per month (as info and used in calculating): \$14,752.19
- Estimated Balance at the end of the Extension Period (Contingency): \$10,815.70
- Balance and Spend Rate:

Strat Cavros, AASHTO reported that the July expenses were around \$3,000. This would lower the monthly spend rate and increase what the anticipated balance will be. Tim Ziethen will provide an updated report to the Executive Board on 10-4-22.

- Status – Website Refresh

iEngineering Corp. was selected as the vendor for the refresh of the NGEC website.

A kick-off meeting with iEngineering took place on 8-23-22. Participants included Steve Hewitt and Ray Hessinger as well as the AASHTO team of Shayne Gill, Strat Cavros, Rebecca Anger and David Dubov and representatives of iEngineering.

In September, iEngineering, NGEC (Steve Hewitt/Ray Hessinger) and AASHTO (Shayne Gill, Strat Cavros and David Dubov) met twice (9-16 and 9-9-27-22) to discuss and finalize Task I and II based on the recommendations provided by the vendor. On 9-27-22, the NGEC representatives approved Task I and Task II after selecting from a choice of several recommendations. The vendor will now move on to Task III.

- Status – Seeking new funding for the NGEC:

With Amtrak as the grantee of NGEC funds, it is to be the applicant for a CRISI Grant requesting additional funding for the NGEC. The NGEC has operated for nearly 13 years with a total of \$4 million being appropriated. Although the NGEC – or groups associated with the NGEC - have requested additional funding throughout the years, we have never received a reauthorization or new funding.

After repeated attempts to find options for funding the NGEC beyond the current grant agreement which ends on 9-30-2023, it was decided that applying for a CRISI grant while still looking to Amtrak or FRA for other options was the way to go.

NGEC Treasurer, Tim Ziethen, Amtrak, has prepared an application and it is with the Amtrak committee under review.

In September, the draft application was approved by the Amtrak grants committee and by the Amtrak Executive Leader Team as one of the Amtrak applications to be moved forward. In late September, Tim Ziethen provided Steve Hewitt with the DRAFT narrative for Executive Board review and comment. The Board members were provided with the draft and Steve Hewitt and Ray Hessinger have made some suggested edits. On October 4, 2022, the Executive Board will discuss the draft narrative and next steps.

Once the application has been finalized and submitted to FRA, the NGEC cannot advocate for itself, but industry members can as van individual states. Letters in support will be critical to the success of the application. Steve Hewitt will provide status updates as to if and when the application is submitted to FRA, and what the next steps are for advocating/sending letters of support..

- 2022 NGEC two-pager:

The 2022 NGEC two-page educational document was released in January 2022. To date 625 copies have been distributed.

The FASC has begun the process of updating the two-pager for its 2-23 version. Missouri DOT has, once again, agreed to provide the graphic arts service to format the 2-23 version and to print the hard copies,

- Annual By-Law Review/Update:

Second FASC Vice Chair John Oimoen, IDOT, and Steve Hewitt presented a couple of recommended changes to the FASC on 8-17-22. They are related to permissible activities of the Committee.

FASC members were asked to review the proposed language between now and September's FASC call, and Tim plans to talk to Amtrak legal to potentially add language regarding permissible (or not) expenditures from grant funds or from outside sources related to members attending trade shows etc.

Steve Hewitt was asked to talk to Chairman Ray Hessinger about the By-Laws discussion and also about a request from FRA to make more liberal use of the electronic voting procedures.

Ray acknowledged that discussion and noted that anytime that it made sense to do so, the electronic vote procedure would be used and noted that it was most recently used for approval of the website refresh proposal from iEngineering.

On September 14th the FASC met and discussed the proposed changes. Because the attendance at the meeting was low, Chairman Tim Ziethen agreed with a recommendation by Steve Hewitt that a vote on the changes should be tabled until the next call (10-12-22). On that date, the FASC will consider the changes for approval to be sent on to the NGEN Executive Board for its review. The Board will need to have had the changes in writing for 30 days prior to a vote for adoption.

- Multi-State Rail Car Procurement (provided by Caltrans) as of 9-15-22:

The Cab Car shell final design has been approved and the cab cars are in production. Remaining Cab Car FDRs are in the final submittal and review stage. Cab Car Safety Appliance documents are in review with FRA, and the Cab Car Clearance information has been approved by Amtrak. IDOT Café Car system level FDR reviews are nearly complete.

The Cab Car Collision and Corner Post Appendix F testing is complete, and the Rev B test report has been approved. The revised Cab Car Compression Test Report is also now approved. The Sample Car Inspection for cab car is tentative for early 2023, and the Vending Car FAI is currently scheduled for September 28.

117 cars are in production or have been produced at Siemens Sacramento Facility. Revenue Service relevant FMIs are in progress and open items related to Conditional Acceptance are being addressed. IDOT coaches are currently in revenue service and Caltrans is planning revenue start once necessary agreements are in place.

- Metro-North Dual Mode Locomotive Equipment as of 9-15-22:

The first session meetings were held in Sacramento, Ca. and in Germany.

Siemens is updating documents based on Metro-North comments.

Metro-North reviewed mock-ups of 2 items: cab control and the emergency exit in the front of the cab.

- Amtrak Equipment Procurement Update – as of 9-15-22:

On the Acela:

They have received Trainset 4 and the next one is expected mid-month (September).

They are continuing to go through the qualification process and preparing to submit to FRA.

On the Charger Locomotives:

Progress continues with 12 of 15 delivered and commissioned into service.

On the Intercity Trainset (ICT):

They are close to done with Intermediate Design Review and are moving on to FDR.

On the GP38 Locomotive – Non-revenue locomotives:

The first one arrived at the shop on 9-1-22 and the second was to arrive shortly.

- Connecticut DOT Rail Car Procurement as of 9-15-22:

As of 8-18-22, CtDOT reported that 137 questions had been received and responses to those questions were set to go out on 9-19-22.

- VIA Rail Equipment Procurements:

On 2-25-22 at the Annual Meeting a comprehensive overview/update of the VIA Rail procurement was presented. The presentation has been posted to the NGEC website and distributed to all NGEC members.

- Document Control Progress Report – 9-15-22:

On 9-15-22 Tammy Krause provided the following update to the NGEC Technical subcommittee:

“My update today is very simple all I have worked on since the last TSC meeting was the Bi-Level DCRs. They have been sent to the Working Group Leaders.”

Steve Hewitt asked Tammy if a timeline had been sent for Working groups to complete their work and submit comments or results (reject/accept etc.). Tammy said she did not set a date yet, but would like to set it as 10-15-22. This date was subsequently set and reported in the minutes of 9-15-22.

Asked if she has continued her regular meetings with the technical writer – Cameron Cordell – Tammy said those discussions continue.

Asked by Steve Hewitt the status of incorporating the Metro-North Dual Mode Locomotive specification's format improvements across the PRIIA specifications, as requested by Chairman Hessinger, Tammy noted that “the Dual Mode formatting is being evaluated for how much work it will take to actually implement. Camren and I should have an estimate of the amount of work in a few weeks”.

- NGEC 2023 Annual Meeting:

The 2023 NGEC Annual Meeting will be held a bit earlier than in past years. This year it will be held on February 3rd. The location is, once again, the Hyatt Regency Capitol Hill, Washington, DC Capitol Room B. The time for the meeting will likely be the same as last year (8:00am Registration – Meeting 8:30am – Noon Eastern).

Status of 2022 Priorities as of 9-30-22:

Priority Area: Review/Update the Bi-level specification currently in Revision C.4. With Amtrak looking at using some of the funding from the new IIJA for its western fleet, it makes sense for the NGEC to review and update the Bi-Level car specification.

Action as of 9-30-22: Bi-Level Car Specification Review/Update is underway. A new DCR form has been adopted and is now being used. As of 8-31-22, 173 DCRs have been received and the process of working group's review has begun. The date for completion of the working group reviews was set for 10-15-22.

Priority Area: Review the car body materials issue from a broader perspective for all NGEC equipment not only DMUs. Ray would like to take a look at developing a consistent approach for all of the NGEC vehicle specifications.

Action as of 9-30-22: The Carbody Materials Working Group has about completed its work and will submit its recommendations to the Technical subcommittee in October.

Priority Area: Review “emerging technologies”: On the technical subcommittee call of 12-9-21 the topic of emerging technologies for propulsion was raised. Ray Hessinger believed that the technical subcommittee should conduct a scan of the industry regarding emerging technologies for propulsion and how they relate to the NGEC.

Action as of 9-30-22 Dave Warner initially gave a zero emissions presentation during the Annual Meeting and followed that up with a presentation to the Executive Board on APTA's effort to develop Alternate Fuel Safety Standards. Dave continues to monitor these activities and will present updates as appropriate.

Priority Area: Review and consider using the Metro-North Dual Mode Locomotive Specification organizational changes to determine if they should be adopted by the NGEC and applied across the board to all NGEC specifications. This would be an administrative change not impacting technical content of any of the specifications and could be resolved by the Executive Board.

Action as of 9-30-22 -This is included in the DCM action Plan and will likely follow the Bi-Level Car Specification update or may begin simultaneously with making updates to that specification. On 9-15-22, Tammy Krause reported that she has been discussing this with the Technical writer and it may be a bit more complicated than thought to make the changes. She will continue working this out.

Priority Area: Review/update NGEC Reference and Drawings series 305-900 and 305-800.

Action as of 9-30-22: This item is on the DCM action plan for 2022 – no activity on reviewing the reference documents per se, but Tammy Krause, Document Control Manager will be working with Jeff Gordon to create a new reference specification to address the Volpe Center information on CEM.

Technical subcommittee

Chair: George Hull, Amtrak

Vice Chair: Joe Paul, Amtrak

The Technical subcommittee holds bi-weekly conference calls on Thursdays at 3:00pm Eastern

During the month of September 2022, the NGEC Technical Subcommittee met twice – on the 1st and the 15th.

Key decisions and action item updates from the month of September 2022, included:

- Backgrounder educational document:

The 2022 NGEC two-page educational document/handout is now available in electronic or hard copy versions. Requests should be sent to Steve Hewitt at shewitt109@aol.com

To date 625 copies have been distributed.

- Document Control Update as of 9-15-22:

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

- A new Communications Working Group that has been formed from the Electronics on Trains Working Group. If anyone has an interest in joining this Working Group, please let me know. The focus will be on-car communications. The sunseting of the Digital Hardware Specification and stopping work on the Software specification was approved by the Executive Board on 8-23-22. The working group has begin to meet.

- Multi-State Car Procurement - Caltrans (Lead State) update as of 9-15-22:

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

- Metro North Dual Mode Locomotive Procurement as of 9-15-22:

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

- Amtrak Equipment Procurement Updates as of 9-15-22:

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

- Connecticut DOT Rail Car Procurement as of 9-15-22:

- See the update provided in the Executive Board section of this report.
- University of Nebraska study on High Speed wireless technology as of 9-15-22:

From Hamid Sharif:

- On 7-21-22, Hamid Sharif provided the following update for inclusion in the meeting minutes:

For this project, we have been studying less utilized RF spectrum to ease the scarce RF resources issue. We selected 160 MHz since this band has been mainly used for voice applications. We designed and implemented computer models to explore the properties and capabilities of the 160 MHz RF band, and its suitability for a variety of applications.

We designed both a single-carrier transceiver architecture and an OFDM-based transceiver architecture for 160 MHz, and conducted evaluations of both designs. We also implemented and evaluated different channel models for this band.

This quarter, we designed the network layers for working with the 160MHz channel to evaluate end-to-end applications.

We are in the process of collecting computer simulation results for end-to-end applications. The plan for the next phase is to perform field tests to verify our 160 MHz model and its performance.

No update was provided since the 7-21-22 report.

- Working Group on Specification Weight Issues as of 9-15-22:

Jeff Gordon reported that the last meeting of the working group was held on 8-19-22.

The document is nearly complete. Jeff has some work to do on it before sending back out to the working group members.

The document is turning out a bit differently than expected. Jeff said he is not sure exactly how the Technical subcommittee will use it.

He noted that the group has uncovered things that need to be changed in the spec. None of these are controversial. Some are simply updates to the references and some are corrections to equations that have changed. Jeff will handle these through the DCR process that is ongoing now on the Bi-Level specification update.

Jeff expects the work to be complete by November with working group meetings to be held in September and October 2022.

The Finance and Administrative Subcommittee

Chair: Tim Ziethen, Amtrak

Vice Chair: Brian Beeler II, NNEPRA for Maine DOT

Second Vice Chair: John Oimoen, Illinois 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 September 2022, the Finance and Administrative Subcommittee met on the 14th

Key decisions and action item updates from the month of September 2022, included:

- Treasurer's Report and Finance and Administrative Sub-committee:

Balance/ Spend Rate:

Total Initial Grant Amount: \$1,250,000.

Expenses Incurred through June 2022: \$1,017,901.39

Balance remaining: \$ 232,098.61

Current Spend Rate per month (as info and used in calculating): \$14,752.19

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On 9-14-22, Strat Cavros, AASHTO reported that the July expenses were around \$3,000.

This would lower the monthly spend rate and increase what the anticipated balance will be. Tim Ziethen will provide an updated report to the Executive Board on 10-4-22.

- Exploring Funding Options

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

- Conveying the message as of 9-30-22:

The 2022 NGEC two-pager is available as reported in the Executive Board section of this report and 625 copies have been distributed.

Along with the two-pager, the website refresh will look at ways to increase NGEC visibility. Details on the status of the website refresh can be found in the Executive Board section of this month's report.

- Quarterly Grant Agreement Progress Report to FRA

All reports this year have been submitted on time. The report for the period ending 6-30-22 was submitted to FRA by 7-29-22.

The next report will be due to FRA by 10-30-22.

The milestone updates for the quarter ending 9-30-22 are included at the end of this Activities report and will be used as a part of the narrative for the FRA progress report.

- By-laws changes to allow activities that will increase public awareness:

See the Executive Board section of this month's report for details on the By-Laws update.

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.

NGEC Specification Review Panels did not meet during the month of September 2022.

Milestones – Quarterly update (July 1, 2022 through September 30, 2022)

Bi-weekly meetings:

Throughout the quarter, the NGEC Executive Board and the Technical subcommittee held bi-weekly conference calls with exceptions as noted due to schedule conflicts. All business of the Board, the Technical subcommittee and the Finance and Administration subcommittee continued to progress throughout the quarter.

Monthly meetings:

During the quarter, the Finance and Administrative Subcommittee (FASC) met twice (August and September) due to the absence of the Chair and Treasurer in July that meeting was canceled. The work of the subcommittee progressed as noted above.

Dissemination of educational/informational pieces:

The 2022 two-page educational/backgrounder was released in February 2022. To date, around 625 hard and soft versions have been distributed to NGEN members and various associations.

The website refresh contract was executed and the vendor has completed Task I and II and is beginning Task III.

NGEC Annual Meeting:

The (12th) Annual Meeting took place virtually on 2-22-22 and was the NGEN's first Hybrid (in-person and virtual) meeting. The meeting was attended by approximately 114 members.

The NGEN's 2023 Annual Meeting (the 13th) will take place on February 3, 2023 at the Hyatt Regency Hotel on the Hill, Washington, DC.

Annual Review of NGEN By-Laws and Operating Procedures:

The 2021 annual By-Law review was completed in November 2021. The review began within the FASC and was ultimately adopted by the Executive Board with all recommended changes approved.

The 2022 By-Laws review has been conducted. A vote by the FASC to advance proposed changes will be taken on 10-12-22.

Grant reporting:

As required by the Grant Agreement, Amtrak will submit a quarterly report to the FRA. Information provided in the monthly NGEN Activities reports for the quarter, prepared by the NGEN Manager, will be utilized as a basis for the Quarterly Reports to the FRA.

All quarterly reports to date have been submitted on time to FRA.

The second FFY 2022 quarterly progress report to FRA was submitted on time on 4-28-22.

The third quarterly report for the period covering 4-1-22 to 6-30-22 was submitted on time on 7-30-22.

The fourth quarterly report for the period covering 7-1-22 through 9-30-22 will be due to FRA by 10-31-22.

Fiscal and contractual actions:

During the April 1 to June 30, 2017, quarter, the Finance and Administrative subcommittee, and, subsequently, the Executive Board, adopted a motion that expressed the intent to extend the contracts of AASHTO and the subcontracts coordinated with the Grant Agreement and consistent with the budget and SOW. Currently, Amtrak and AASHTO are in the process of developing their contract extension and, following its execution, AASHTO has been directed to do the same with the sub-contracts identified in the SOW and noted in the adopted motion inserted below.

"As was intended in past NGEN budget approvals and to ensure compliance with the Audit of Grant Agreement of March 27, 2013, and the NGEN's updated Procedure of Establishing Contract Support adopted August 6, 2013, the NGEN authorizes Amtrak to contract with AASHTO for administrative support services as well as subsequent sub-contracts per the statement of work for entities such as; with Hewitt Consulting for Manager of Support Services, and with SalciConsult for Specification Consultant services. In addition, with the Federal Railroad Administration's June 8th, 2015, approval of the NGEN's Supplemental Statement of Work and related budget extension through September 30, 2017, and its subsequent approval of the Statement of Work and Budget included in the Grant Agreement executed on October 26, 2016 for the period beginning October 1, 2016 through September 30, 2019, Amtrak is authorized to extend its agreement with AASHTO and AASHTO's sub-consultants in accordance with the Statement of Work."

Adopted by the NGEC Executive Board on 6-6-17.

On 9-26-17, AASHTO and Amtrak executed a contract extension for NGEC Support services to continue from 10-1-17 through 9-30-19. On 9-27-17 AASHTO executed a contract modification with Hewitt Consulting – (Steve Hewitt) extending the NGEC Manager’s contract for the period 10-1-17 through 9-30-19.

In the fourth quarter, 2017 – AASHTO and Amtrak executed a contract extension for technical support (spec writing) with Casamar – extending the contract through 9-30-19.

During the fourth quarter, NGEC Revision Control Coordinator (RCC), Tammy Krause, Amtrak, accepted the separation agreement and announced her departure to the NGEC Executive Board – effective 12-31-17. To fill the void created by this change, Amtrak has temporarily assigned these responsibilities to Michael Burshtin, Amtrak, and has begun taking steps needed to potentially subcontract this work similarly to how the other NGEC support services are provided. The SOW was revised by the NGEC Executive Board during this quarter to provide the flexibility to have the duties of the RCC conducted in house – Amtrak – or be subcontracted to a consultant. The Amtrak and FRA grants offices are reviewing the proposed change and, if approved, a sole source contract will be executed per NGEC Contract Management procedures.

As of 3-31-18, and as noted previously in this quarterly report, the NGEC Grant Agreement SOW revisions have been submitted to FRA and are under review. It is anticipated that the revisions will be approved and executed in April 2018. Simultaneously, the actions necessary to execute a contract for the Document Control Manager (DCM) have progressed with a revised SOW and budget having been submitted by the prospective sole source contractor for review and approval of the NGEC Treasurer and the Technical Subcommittee Chair who will be responsible for managing the work of the DCM.

During the quarter ending June 30, 2018, per the NGEC process, AASHTO executed a contract with TLK Associates, LLC (Tammy Krause) to perform the Document Control Management responsibilities, as identified in the SOW and budget, and as previously approved by the NGEC Executive Board.

During the quarter ending September 30, 2018, the FRA and Amtrak executed a no-cost 12-month extension (as approved by the NGEC Executive Board and formally requested by Amtrak) of the NGEC Grant Agreement. This extends the grant performance period to 9-30-2020.

Subsequently, on 5-8-19 AASHTO executed contract modification #2 with Hewitt Consulting – (Steve Hewitt) extending the NGEC Manager’s contract for the period 10-1-19 through 9-30-20.

In December, the Executive Board Chairman approved a contract modification extending the document control manager’s contract through 9-30-20.

During the quarter ending June 30, 2019, the NGEC Finance and Administrative subcommittee, through its chair, (the NGEC Treasurer) clarified with Amtrak Grants and FRA Grants that the NGEC would be eligible for a further no-cost extension beyond the current grant period end date of 9-30-2020.

In the quarter ending December 31, 2019, the FRA confirmed that a no-cost NGEC grant agreement extension can be for multiple years and has recommended that Amtrak (and the NGEC) make the formal request by July ,2019 to fit within the window for extension requests (July -September). The NGEC Executive Board agreed with the FASC recommendation that the grant agreement extension be for a 36-month period (10-1-2020 through 9-30-2023) and will formalized its request in January 2020.

In January 2020, Amtrak submitted the formal request (GARF) for a 36-month no-cost extension. It is currently in the review process at FRA with the intent being to approve/execute the agreement extension sometime in May 2020.

As of 6-30-20 – the FRA is reviewing the grant extension request with consideration of approval anticipated to occur soon.

As of this quarter, (ending 6-30-20) all NGEC subcontractor/consultant contracts are current.

On 9-16-20, the FASC Chairman announced that the FRA and Amtrak had approved and executed a 36 month – no cost NGEC grant agreement extension. This would extend the NGEC grant agreement through September 30, 2023. The scope and activities identified in the grant agreement remain the same and the work of the committee will continue as described there-in.

As of 9-30-20 – the subcontractor/consultant contracts are current. As of the end of business on 9-30-20, they will need to be extended coordinated with the 36-month extension. The first step in this process is for Amtrak and AASHTO to extend the AASHTO contract for the 36-month period. AASHTO would, in turn, extend the subcontractors contracts for the same period as per the motion adopted by the NGEC Executive Board on 6-6-2017 and per Chairman Ray Hessinger’s instructions during the Executive Board web conference held on 9-22-20.

In October 2020, all contract extensions (Amtrak/AASHTO) and ASSHTO/Hewitt, AASHTO/Krause and AASHTO/Casamar) were executed and will run through 9-30-23.

As of 9-30-21, all contracts are up to date and active.

As of 12-31-21 all contracts are up to date and active.

As of 3-31-22 all contracts are up to date and active.

As of 6-30-22 all contracts are up to date and active.

As of 9-30-22 all contracts are up to date and active.

Review/Update of NGEC Specifications (Document Control):

This activity is ongoing:

Activities specific to this quarter:

During this quarter, Document Control Manager Tammy Krause has continued the review of the Bi-Level specification and is using the updated the Document Change Request form. The deadline for working groups to have reviewed and submitted recommended actions on proposed DCRs is 10-15-22.

The carbody materials working group has about completed its work and is expected to provide its recommendations to the Technical subcommittee in October 2022.

Dave Warner, Industry member (STV Inc.) and NGEC member “emeritus” gave a presentation on emerging zero emission technologies and will provide the Executive Board with a presentation on the activities of APTA in this area.

In this quarter, Mr. Warner has continued to monitor activities and is keeping Steve Hewitt apprised. A follow-up report to the Executive Board will take place as appropriate.

Status of 2022 Priorities as of 9-30-22:

Priority Area: Review/Update the Bi-level specification currently in Revision C.4. With Amtrak looking at using some of the funding from the new IIJA for its western fleet, it makes sense for the NGEC to review and update the Bi-Level car specification.

Action as of 6-28-22: Bi-Level Car Specification Review/Update is underway. A new DCR form has been adopted and is now being used. As of 6-28-22, no DCRs have been received. A deadline for DCR submittals had been set for COB 6-30-22. Steve Hewitt will notify NGEC members that this deadline has been extended to COB on 7-11-22.

Priority Area: Review the car body materials issue from a broader perspective for all NGEC equipment not only DMUs. Ray would like to take a look at developing a consistent approach for all of the NGEC vehicle specifications.

Action as of 6-28-22: The Carbody Materials Working Group held its first meeting on 5-11-22. The team leader is Michael Gill, SNC Lavalin/Atkins. The next meeting is scheduled for 7-6-22.

Priority Area: Review “emerging technologies”: On the last technical subcommittee call (12-9-21) the topic of emerging technologies for propulsion was raised. Ray believes that the technical subcommittee should conduct a scan of the industry regarding emerging technologies for propulsion and how they relate to the NGEC.

Action as of 6-14-22: Dave Warner gave a zero emissions presentation during the Annual Meeting and followed that up with a presentation to the Executive Board on APTA’s effort to develop Alternate Fuel Safety Standards

Update: On 6-28-22, Dave Warner provided the following:

The most recent meeting was held last Tuesday (6/21) as APTA continues work on the whitepaper which is aimed at determining criteria for FRA safety compliance. The hazard analysis of battery-electric requirements has been drafted, and is in the group-editing process. Hazard analysis of hydrogen requirements will begin later this month, focusing on the hydrogen handling and storage and use. All of the battery hazard analyses are also applicable, since a hydrogen fuel cell-powered vehicle is really a battery powered vehicle which carries its fuel.

Members from Sandia National Laboratory have joined the working group to assist with the hydrogen pieces of the puzzle.

The document has been placed under the PRESS program, which should facilitate the administrative efforts. The long-term goal is to develop a standard by 2026.

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Action as of 9-30-22 -This is included in the DCM action Plan and will likely follow the Bi-Level Car Specification update or may begin simultaneously with making updates to that specification. On 9-15-22, Tammy Krause reported that she has been discussing this with the Technical writer and it may be a bit more complicated than thought to make the changes. She will continue working this out.

Priority Area: Review/update NGEC Reference and Drawings series 305-900 and 305-800.

Action as of 9-30-22: This item is on the DCM action plan for 2022 – no activity on reviewing the reference documents per se, but Tammy Krause, Document Control Manager will be working with Jeff Gordon to create a new reference specification to address the Volpe Center information on CEM.