



*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: January 31, 2020**

**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, taking into account 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: Eric Curtit, Missouri DOT**

**Vice Chair: Charles King, Amtrak**

**Secretary: Ray Hessinger, NYSDOT**

**Treasurer: Tim Ziethen, Amtrak**

**The Executive Board holds bi-weekly conference calls – Tuesday's at 11:30am Eastern**

During the month of January 2020, the Executive Board met two times, via conference call, on the 14th and the 28th.

Highlights, decisions, and action items from the month of January 2020 include:

- Equipment Procurement Updates:
- Status Update - Multi-State Rail Car Procurement as of 1-28-20 - provided by Caltrans:

FDR for the standard coach is complete. Cab Car PDR action items are closed, and the PDR has been approved by Caltrans.

The Complete Coach FAI occurred on November 13-14 in Sacramento.

Testing continues at TTCI on cars 1 and 2 with results of the 2-Car friction brake performance and lighting tests being finalized. Side door cycle testing is scheduled for this week. The climate room testing is ongoing in Ottawa. Car #3 will be shipped to the NEC for FRA 213.345 in February. Plans are in work to ship an additional two cars to TTCI for PTC Brake Testing.

45 cars are in production at Siemens Sacramento Facility. Car #4 is the FAI car and production is reworking open items. The remaining carshells are in various stages of component installation, welding, integration, painting or storage.

System-level FAIs for standard coach are nearly complete with remaining action items under review. Cab Car Structure IDR meeting was held in December and FDR is tentatively planned for February. The IDOT Galley Layout FDR documents have been submitted and the FDR meeting is scheduled February 5 & 6.

- Status Update: Metro North Dual Mode Locomotive Procurement as of 1-28-20:

Metro-North continues to move forward on its Dual Mode Locomotive Procurement.

- Amtrak Locomotive Procurement as of 1-28-20:

On the Acela replacement:

Trainset 1 has been undergoing testing and dynamic runs at Hornell with good results and is going to Pueblo.

Trainset 2 has begun dynamic runs at Hornell.

The other trainsets are in various stages of the assembly process.

On the Locomotives:

This procurement continues to progress with a target of next Spring.

On the Trainset (AmFleet replacement):

They continue to be in the bid review phase by the Amtrak technical and finance committees and it is hoped that a decision will be made by March 2020.

- METRA Equipment Procurement status:

As of 4-9-19, an RFP was on the street for 200-400 bi-level cars. They are going through the process now. Interested parties were to respond by August 2019.

METRA has the NGEC specification, but John does not know if the plan to use it or if they will be in contact with the NGEC or not.

There will be future updates as appropriate. Nothing new reported in December 2019.

- Document Control Update – 1-28-20:

Revision B of the Single Level Trainset specification should be finished this week. Camren had a few follow-up questions that should be addressed later today. I will ask Steve to send out an email when it is complete and listed on the website.

The Diesel Multiple Unit Revision A DCRs are started. I hope to send them out before the Technical Subcommittee next week. After I have the total number of changes, I will put together a timeline.

Camren is currently working on the Equipment Acquisition Best Practices Report and she should hopefully have it done next week. I have not received the scope from her yet, but I hope to receive after our call today.

- VIA Rail Equipment Procurement – status as of 10-31-19:

On the last update – 10-8-20 it was reported that things were going well – with several mock-ups taking place over the next several months. Overall things were moving forward on schedule and in good shape so far.

Next planned update: NGEN Annual Meeting 2-21-20

- The Equipment Acquisition and Ownership Working Group activities as of 1-28-20:

All 4 sections have been sent to technical writer Cameron Cordell to compile into a complete “one voice” document. Tammy Krause was to follow up on Cameron’s progress and report back to the Executive Board.

Tammy will be speaking with Cameron today (1-28-20) and will get a better sense of the timeline. It was agreed that the priority is to complete 305-007 Revision B first, and then focus on completing the Best Practices DRAFT.

- Update: States and Amtrak – Charger Locomotive Experience (last update 7-30-19):

Mid-West States Experience:

The Charger locomotives have been running for 2-years and are working well with all of the locomotives in service and only the normal “teething” issues occurring and being worked through.

One area that they are striving for improvement and are making improvements on is parts availability and field service. These issues are challenging but being worked out and improving.

There have been several vehicle strikes and debris strikes in the Mid-West, but the good news is that the Crash Energy Management (CEM) performed very well. The engineers were very satisfied with the safety of the cabs.

Overall, they are very pleased with the performance of the locomotives.

California Experience:

Caltrans reported on the average number of miles and engine hours for the locomotives in the various sections of the state where they are being used and noted that they are performing well.

There have been several debris strikes and Siemens and Amtrak are working on repairs.

Caltrans has exercised its option for continuing technical support with Siemens after the warranty has expired.

There have been some instances of ice build-up on the HVAC and they are working on determining the root cause.

Overall, the locomotives are performing very well.

Washington State Experience:

No report provided

Amtrak Experience:

Amtrak has held several meetings with Siemens on parts availability as “we continue to support the states” as our partners.

Amtrak is leasing a state unit to test in Long Distance service. Rolling Stock Engineers are on board to see how the locomotives perform in the hot days and high altitudes. The locomotive is in the trail, not lead, position on this test.

So far it has performed extremely well.

The intent is to also conduct a test in the winter weather to see how it fares. And they are working on resolving the snow ingestion issues that occurred last winter.

Next update: NGEC Annual Meeting February 2-21-20

- 2020 NGEC two-pager educational document:

The NGEC two-pager has been updated for 2020 and printed by MODOT. Steve Hewitt has received 400 hard copies and will distribute a hard copy to all NGEC Annual Meeting attendees. The hard copies are available by request.

50 copies were sent on 1-10-20 to Jack Madden for distribution at TRB during the NGEC session on 1-14-20.

Eric Curtit has sent Steve Hewitt the PDF version, so it is now available for distribution electronically.

Contact Steve Hewitt at [shewitt109@aol.com](mailto:shewitt109@aol.com). If hard copy, let Steve know where to send them and how many.

- FASC update and Treasurer's Report as of 1-28-20:

- a. Balance-Spend Rate:

Tim Ziethen reported: (Includes Invoices through November 2019).

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

Amount Spent: \$515,042.76

Balance remaining: \$ 734,957.24

Spend Rate per month: \$13,553.76

Projected spend in the remaining months of the current grant: \$155,537.57

Balance anticipated at the end of the grant period (9-30-20): \$579,419.67

Expenditures anticipated in a 36-month no-cost extension: \$540,000.00

Average Monthly expenditure: \$15,000.00

Balance remaining at the end of the 36-month extension: approximately \$39,419.67

- b. Next Steps/timeline in the process of requesting an extension through the Exec Board process

Tim confirmed the process to formally request a no-cost grant agreement entails submitting a GARF which is first presented to the executive Board for approval. The GARF would request a 36-month extension at no cost with the supporting budget documentation as based on the above information. The GARF must be submitted to the FRA in advance of the 90-day window for grant amendment requests (July1 – September 30, 2020).

The FRA has previously confirmed that the NGEC is eligible to request a multi-year no-cost grant agreement extension. On 1-8-20, The FASC reviewed the current balance remaining and the anticipated monthly run rate and has agreed that there is ample funding remaining to support a 36-month extension beginning 10-1-20 through 9-30-23 with a cushion of around \$51,000 at the end of the extension.

The FASC has recommended that the Executive Board go forward with the process for requesting a 36-month no cost grant agreement extension.

Tim completed a DRAFT GARF and asked for internal review by the Amtrak Grants office. The Grants office provided a positive review and the next step is to have Amtrak legal review it. In the meantime, Tim suggested that the NGEC Executive Board approve the recommendation of the FASC to go forward with the 36-month no-cost extension.

On a motion by Tim Ziethen, Amtrak, and a second by Brian Beeler II, for Maine DOT, the Executive Board agreed with the recommendation to take the steps necessary for formally requesting a 36-month no cost grant agreement extension. (The extension would be for the period beginning on 10-1-20 through 9-30-23).

With a quorum having been established and no objections being offered, Chairman Curtit determined that consensus was achieved, and the motion is approved.

- TRB session – NGEC 10 years of Progress:

Charlie King reported that the TRB session went very well and was well received. Jack Madden “was the orchestra leader” – thank you Jack, and the presenters all did a great job of getting the point across to those in attendance. The presenters made it clear that the NGEC specifications save Amtrak, FRA and states money and time on engineering and in getting the product out safely.

Special thanks to John Oimoen, IDOT, who had double duty in giving the Chairman’s presentation as well as his own state’s perspective presentation.

Steve Hewitt reported that he had received a request from Jack Madden to see if there was interest from Board members to participate and reprise some or all of the presentations given during TRB at the Rail Tech Conference & Expo in Worcester, MA on March 19<sup>th</sup>. Steve thanked Jack and told him he would ask Board members about it on the 1-28-20 call. Steve noted that with the week of meetings taking place in DC in February, it may be difficult for members to travel again in March.

It was agreed that Steve Hewitt will inform Jack Madden that the NHEC members will not be able to participate at this conference, but the presentations from TRB will be available on the NGEC website.

Steve Hewitt will also ask Jack Madden for the name of his contact at Keolis and he will extend an invite to become an industry participant of the NGEC.

- Preparing for the 10<sup>th</sup> NGEC Annual Meeting 2-21-20:

The Annual Meeting will take place on 2-21-20 at the Hyatt Regency Hotel Capitol Hill, Washington, DC. The meeting will begin with coffee and registration at 8:00am and will end at 1:00pm. If you have not registered your attendance with Steve for the Annual Meeting, please do so by 2-7-20 so that an accurate head count can be provided to AASHTO and the appropriate tent cards and name badges can be printed.

Currently (2-5-20) there are 73 registrants for the meeting.

- NGEC Leadership Transition – Nominating Committee update as of 2-5-20:

On 1-28-20, Eric Curtit reported on the fact that a nominating committee has been named and he has communicated with the members what their role is and provided some suggestions. Oklahoma DOT will no longer serve on the Board but will remain as a member state. Two states – Michigan and Missouri will need to name new representatives.

As of 2-5-20, Missouri has named a new Railroad Administrator – Troy Hughes and he has been named to serve on the Executive Board, the NGEC Technical subcommittee and the Finance and Administrative subcommittee.

Michigan has not communicated its intentions since the retirement of Tim Hoeffner.

#### **Technical Subcommittee:**

**Chair: Charles King, Amtrak**

**Vice Chair: George Hull, Amtrak**

**The Technical subcommittee holds bi-weekly conference calls on Thursday’s at 3:00pm Eastern**

During the month of January 2020, the Technical subcommittee met twice, via conference call, on the 9<sup>th</sup> and the 23<sup>rd</sup>.

Key decisions and action item updates from the month of January 2020, included:

- Status of the activities to update ECP Standards: This is an ongoing item which the Technical subcommittee is tracking:

ECP Project:

*The test committee met on May 29, 2019 with some minor edits requested to the final FRA report. The report will be submitted by APTA under docket no. FRA-2015-0078. The report will be made available to the NGEC after APTA submittal. The revenue service demonstration resulted in 1,039,740 ECP fleet miles and 2,126,747 Emulation (BP operation) fleet miles. The total mileage for ECP and emulation was 3,166,541 fleet miles. A total of five incidents were reported the revenue service demonstration. Two incidents were related to electronic hardware, there were no software incidents and three incidents related to training which occurred early in the ECP revenue service demonstration. The hardware incidents have been properly investigated and resolved. The APTA PRESS standards for the emulation 26C configuration and ECP configuration were approved and will be available on the APTA standard website. The equipment provided by New York Air Brake (Knorr) and Wabtec were approved under this project. Draft regulatory language has been prepared and provided to the FRA.*

*Amtrak will continue the revenue service demonstration.*

On 7-11-19, Paul Jamieson reported that all reviews are done, and the report is in the hands of APTA to package the report. Paul has requested that APTA let him know the anticipated date of completion. Once the report is made available, Paul will provide it to Steve Hewitt for distribution to the NGEC members.

Next update as appropriate – nothing new to report in January 2020.

- Backgrounder educational document:

The updated NGEC two-page background document has been printed and is now available in hard copy and/or in a PDF version. Copies can be obtained by sending a request to Steve Hewitt at [shewitt109@aol.com](mailto:shewitt109@aol.com)

- AWG/RVACC:

Background:

At the 2018 annual meeting, Melissa Shurland, FRA, provided an update on the activities of the Accessibility Working Group and on the RVACC effort. The presentation is available on line on the NGEC website at [www.ngec305.org](http://www.ngec305.org).

The last update provided to the Technical subcommittee was on 10-4-18 when Melissa Shurland reported that there still has been no word from the RVACC on the possible release of a rule for accessibility on Rail Vehicles.

An Accessibility update will be provided at the 2-21-20 NGEC Annual meeting.

- Document Control Update:

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

Procurement Updates:

- Multi-State Car Procurement - Caltrans (Lead State): Progress reports from the lead state on the PRIIA multi-state car procurement is provided on each Technical subcommittee call and each Executive Board call.

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

- Metro North Dual Mode Locomotive Procurement:

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

- Amtrak Equipment Procurement Updates: Progress reports are provided by AMTRAK CMO and NGENC Vice Chair, Charlie King on a regular basis.

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

- METRA Equipment Procurement:

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

- AAR Update on the TAG Committee on LED Headlights as of 1-31-20:

On 10-31-19, on behalf of Dr. Tarek Omar, FRA – Eric Sherrock, Ensco, provided the following update:

*The test plan has been developed in cooperation with FRA and the AAR Locomotive Committee LED Standard Development TAG. Phase III testing, which will focus on the performance of selected light fixtures on moving locomotives, will be started during the week of November 11 at the Transportation Technology Center. We will offer additional updates as information is available.*

*If you need any additional information, please contact Sean Woods ([woods.sean@ensco.com](mailto:woods.sean@ensco.com)).*

There were no new updates provided in January 2020.

- University of Nebraska study on High Speed wireless technology as of 1-23-20:

On 1-9-20, it was reported that they are in the outdoor testing phase and have done over a dozen field tests for distance and software for the radio system they have designed. They have 100 gig of data from testing and are now analyzing that data for a match to the computer models. Hamid hopes to be able to share the results in the next report to the Technical subcommittee (2-6-20).

For further details please contact Hamid Sharif-Kashani via email at: [hamidsharif@unl.edu](mailto:hamidsharif@unl.edu)

- Update: Electronics on Trains Working Group as of 1-31-20:

The NGENC Electronics working group update as of 1-9-20 submitted by working group team leader, David Brabb:

“No meeting was held on Jan 7th due to me (David Brabb) being out of the office. That was OK because we were only going to announce that we are going to send out the Revision A of 305-919 DTL Hardware Specification for review and comment, later this week, to our full working group....and that is our plan now.

We are also now working on the WiDTL specification.”

Next update: 2-6-20

- Preparing for the 10<sup>th</sup> NGENC Annual Meeting – February 2020 – Steve Hewitt, NGENC Program Manager:

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

#### **The Finance and Administrative Subcommittee**

**Chair: Tim Ziethen, Amtrak**

**Vice Chair: Brent Thompson, Washington State DOT**

**Vice Chair: Ray Hessinger, New York State DOT**

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

During the Month of January 2020, the Finance and Administrative Subcommittee met on the 8<sup>th</sup>.

Key decisions and action item updates from the month of January 2020, included:

Treasurer's Report:

a. Balance-Spend Rate:

Tim Ziethen reported: (Includes Invoices through October 2019).

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

Amount Spent: \$496,446.52

Balance remaining: \$ 753,553.48

Spend Rate per month: \$13,417.47

Projected spend in the remaining months of the current grant: \$162,351.43

Balance anticipated at the end of the grant period (9-30-20): \$591,202.05

Expenditures anticipated in a 36-month no-cost extension: \$540,000.00

Average Monthly expenditure: \$15,000.00

Balance remaining at the end of the 36-month extension: approximately \$51,202.05

b. Next Steps/timeline in the process of requesting an extension through the Exec Board process

Tim confirmed the process to formally request a no-cost grant agreement entails submitting a GARF which is first presented to the executive Board for approval. The GARF will request a 36-month extension at no cost with the supporting budget documentation as based on the above information. The GARF must be submitted to the FRA in advance of the 90-day window for grant amendment requests (July1 – September 30, 2020).

The FRA has previously confirmed that the NGENC is eligible to request a multi-year no-cost grant agreement extension. The FASC has reviewed the current balance remaining and the anticipated monthly run rate and has agreed that there is ample funding remaining to support a 36-month extension beginning 10-1-20 through 9-30-23 with a cushion of around \$51,000 at the end of the extension.

It was agreed that the proposed extension and recommendation of the FASC to move forward with the GARF will be presented for Executive Board approval on the next Board call (1-14-20).

On 1-28-20, the Executive Board approved a motion to move forward with the proposed GARF.

Preparing for the 10<sup>th</sup> NGENC Annual Meeting:

On 1-8-20, Steve Hewitt reminded members that the Annual Meeting will take place on 2-21-20 at the Hyatt Regency Hotel Capitol Hill, Washington, DC.

Per the NGENC By-Laws, a formal notice went out to all NGENC members, including industry participants. All have been notified of the date, location and the hotel room block link.

Currently (as of 2-5-20) there are 73 registrants for the meeting

A draft agenda was approved by the Executive Board in December and was distributed to NGENC members subject to refinements.

As Eric Curtit announced on the last Executive Board call, he has taken a new position in MODOT as Director of Planning and will no longer have Rail in his portfolio. In order to facilitate a smooth transition,



Eric has agreed to stay on as Chair of the NGEC to fill out his term of office which ends with the election of new officers at the Annual Meeting. Eric will not be attending the Annual Meeting and has asked Charlie King to Chair in his place that day.

A nominating committee has been appointed – Eric is chairing the committee and its members are: John Oimoen, IDOT, Ron Pate, WSDOT and Ray Hessinger NYSDOT. Their job is to confirm with current State Board members if they are willing to continue in their role on the Board and to touch base with several state members who have informed us that they will be retiring.

Allan Paul), NCDOT, retired at the end of December. His replacement on the Executive Board is Jason Orthner. NCDOT has also named a successor for Allan on the Technical subcommittee – Matthew Simmons.

Tim Hoeffner, Michigan DOT retires at the end of this week. The nominating committee will need to ascertain if Michigan will remain on the Board and on the FASC and, if so, who will be Tim's replacement for those positions. John Rosacker.

Oklahoma DOT has agreed to stay on as a member of the NGEC, but not as a Board member. This means the Board, if all other members remain the same, will have a representation of 11 states. This fits within the By-Laws which call for **no more** than 12 state Board members.

Tim provided a brief overview of the FASC presentation. When he has completed the first DRAFT, it will be distributed to all FASC members for review (over the next few days). On the 2-5-20 FASC call, a walk-through of the DRAFT presentation will take place.

- Discussion: NGEC Equipment Acquisition and Ownership Working Group – Steve Hewitt:

All 4 sections have been revised and submitted to the technical writer. Tammy Krause had contacted the technical writer (Cameron Cordell) to ascertain a timeline and anticipated costs for this assignment. Steve Hewitt is awaiting a status update from Tammy.

Steve noted that, once the compiled DRAFT has been completed, it will be distributed to all working group members for review and comment. Steve also noted that while the goal is to have a DRAFT ready for review by the Board at the Annual Meeting, it is very possible that that timeline will slip. Steve commented that NGEC chairman Curtit's intent has always been to get it right rather than rush the process.

#### **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 Trainset Specification Review Panel met on October 17<sup>th</sup> and approved the Trainset Specification 305-007 Revision B Review Panel Report and recommendations as presented by consultant Larry Salci. On 10-22-19, the NGEC Executive Board accepted the Review Panel's Report and Recommendation and formally adopted PRIIA Single Level Trainset Specification 305-007 Revision B.

In January 2020, the Review Panels did not meet.