



Section 305 Next Generation Corridor Equipment Pool Committee (NGEC)

Monthly Activities Report: July 31, 2016

Submitted by: Steven J Hewitt, Manager, S305 NGEC Support Services

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: Mario Bergeron, Amtrak

Secretary: Ray Hessinger, NYSDOT

Treasurer: Darrell Smith, Amtrak

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

During the month of July 2016, the Executive Board met once –via conference call - on the 19th.

Key decisions and action item updates from the month of July, 2016 included:

- Mid-West States – Section 6 progress report: Lease and operating agreements between the states and Amtrak Mechanical are being finalized. The states have a fully executed ownership agreement in place. Fleet management procurement is progressing well.
- 514 Subcommittee update as of 6-21-16: Updated forecasts for FY17 and the outlying years (5 years) have been presented by Amtrak, and are under review by the states. Feedback is due to Amtrak by July 6th with publication of the first full DRAFT of the CIP scheduled for July 15, 2016. No report was provided during the July 19, 2016 Executive Board conference call.

- Responding to VIA Rail's request to use PRIIA Specifications: The Executive Board approved the DRAFT letter prepared by Steve Hewitt, through the FASC and it was finalized for Eric Curtit's signature, and sent on to VIA Rail (Robert Becker). The letter encourages VIA Rail to reference the PRIIA Specifications as it creates a performance spec with a goal of improving interoperability. VIA Rail, through the letter, will be invited to join the Technical subcommittee as industry participants. Mr. Becker responded immediately, thanking the NGENC for authorizing the use of NGENC specs and for the invitation to join the NGENC industry member group. Mr. Becker agreed to provide the NGENC with feedback on its use of the spec and any possible changes that are made to it. He will inquire internally as to VIA Rail's interest in participating in the work of the NGENC as an industry member.

Once the Bi-Level Car Revision C.4 has been adopted and the Technical subcommittee working groups begin their updates to the Single Level specifications – Steve Hewitt will follow up with VIA Rail on the invitation to join the NGENC industry participants group.

- Review of the Bi-Level Car Specification C.4 proposed changes: The Review Panel met on 7-21-16 and approved the DRAFT report with recommendations as prepared by Larry Salci. The report has been submitted to the NGENC Executive Board and will be considered for adoption on 8-2-16.
- Two page educational/outreach document: As of July 31, 2016, the two pager has been accepted with the requested changes included, with the exception that the Board has asked for two actual photos of the new Charger Locomotive, rather than artist's renderings. Siemens has agreed to take photos on 8-10 and 11 – 2016 and provide them to Chairman Curtit for his review and consideration of inclusion in the document.
- **Status Update: Bi-Level Car Procurement:** The following report was submitted by Momoko Tamaoki, Caltrans, on July 19th:
 - *FAIs – Truck Assembly FAI took place on July 12 in Rochelle. Our Subject Matter Expert reported that it was an excellent FAI with no open issues. The upcoming FAIs are for food service cars and ATR/UTR in fall, 2016.*
 - *Carshell – We continue to have regular updates from NS to review the progress of the design issues and the schedule for the design activities and component tests leading up to the supplemental design review and to production and testing of the carshell. Carshell design activities are now proceeding in accordance with the schedule requirements of the supplemental design review in 2017. The revisions to the design to meet the full range of design cases have been identified and the analysis task is underway. Currently, the focus is on the methodology being used for the revised analysis exercises and the requirements that Caltrans/IDOT have for ensuring that the analysis is completed to a level of satisfaction for our subject matter experts.*
 - *Testing – The seat/table dynamic tests took place on June 30 & July 1. While some tests were successfully completed, there are still a few open items that need to be discussed and worked out between Caltrans, NS, and Kustom Seating. We are hoping to resolve all issues by fall. As for the Side door endurance test, as of July 11, the current cycle count is 462,262. The Side door system rig is still cycling well. We received preliminary information that the 500,000th cycle will most likely be accomplished during the day this Friday. The cycling will then be stopped for another major inspection and replacement of the drive nut.*
 - *Misc. – Program Management Plan Audit took place on July 13. NS was well prepared. We spent a lot of time on risk management. We were able to close about half the audit items based on the evidence that NS presented during the audit. NS agreed to revise the plan by the end of August to close the rest of the open items. The QA meeting, which took place on July 14, went well. NS was the most prepared that they have ever been. Overall, they have made good progress since our last meeting, and were able to present quite a bit of quality data from the pilot car build. The next QA date was set for October 6. At that time, we will do another CDRL Element Audit. Our Quality system records audit went well with a minimal number of minor findings.*
- **Status Update: Diesel-Electric Locomotive Procurement –** On July 19th the following detailed update was provided by IDOT:
 - *JPEs received Siemens' revised schedule and conduct weekly conference calls. Siemens has been requested to provide a recovery plan for slips in the delivery schedule of the WSDOT and IDOT locomotives. The overall schedule for delivery of the last locomotive is still within the ARRA funding window.*

- *All of the supplier's factory FAIs are complete. The remaining FAIs were conducted June 7-9 at Siemens' factory. The FAI for the first complete locomotive is complete with follow-up action items. The FRA sample car inspection was also conducted, with a few labeling items for correction and one step rung to adjust.*
- *The first two pilot locomotives are being tested at TTCl for vehicle/track dynamic interaction. All tests so far, have gone well.*
- *The four MARC cars have arrived at TTCl for locomotive propulsion tests.*
- *The monthly QA meeting was held July 6 at Siemens factory.*
- *All fifteen (15 ea.) DCRs will be processed by the re-established locomotive working group.*
- *The test plan for 125 mph testing on the North East Corridor was approved by FRA, as submitted by (Maryland MARC Train Service) MARC. MARC/Amtrak are reported processing the test agreement.*
- *Each JPE are working out details for pre-revenue test plans, with Amtrak.*
- *Follow up Technical Advisory Groups (TAG) continue working on an on-going basis for the action items from the AAR Standard vehicle qualification testing and acceptance. AAR's David Cackovic is the facilitator.*
- *The locomotive weight was reported in June 2016, at 270,725 lbs (+/-). Based on actual component weights, the locomotive weight has varied little in the last six months. The calculated P2 force is within specified limits.*

Technical Subcommittee:

Chair: Mario Bergeron, Amtrak

Vice Chair: Dale Engelhardt, Amtrak

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

During the month of July, 2016, the Technical subcommittee met twice, via conference call on the 14th and 28th. Key decisions and action item updates from the month of July 2016, included:

- RVAAC: RVAAC presented its recommendations for improved access on rail vehicles to the Access Board on July 29, 2015. On February 19, 2016, at the NGEC Annual Meeting, Melissa Shurland, FRA, provided an update presentation to NGEC members. The presentation can be found on the NGEC website. Melissa will continue to keep the Technical subcommittee apprised of the Access Board's progress on its review of the report. Nothing new was reported on this item in July, 2016.
- Accessibility Working Group Update: On 7-28 -16: Melissa Shurland, FRA, was to provide a report on the 7-20-16 AWG meeting and the status of the working group's activities. On that date Melissa was unavailable so the report has been tabled until the next call – 8-11-16.
- Backgrounder educational document: As noted in the Executive Board section of this report, the "two-pager" education and outreach document is waiting to receive two photos of the new Charger locomotive to include in the document. This is anticipated to happen in mid-August. Once approved, it will be printed by AASHTO and made available to all members.
- DEF Working Group: The DEF working group has made great progress and has agreed that going forward it will hold meetings on an as needed basis.
- Diesel- Electric Locomotive procurement update as of 7-28-16 (provided by IDOT):
 - *JPEs continue to receive Siemens' weekly revised schedule and conduct weekly conference calls. The main basis for revised weekly schedules reflects on-going testing up-dates.*
 - *The first two pilot locomotives were being at TTCl for vehicle/track dynamic interaction. The tests are concluded with successful results.*
 - *The locomotives were also tested for AAR Chapter XI track interaction protocol. The tests are concluded with successful results.*

- *JPEs hope for Siemens to test PTC, while at Pueblo. Legal issues for one-day use of the Data Radio and the communications software (the “Image”) continue to be a difficulty. Assistance from Amtrak is needed to facilitate use of the “Image” for this one-day test in Pueblo.*
 - *The four MARC cars have arrived at TTCl for locomotive propulsion tests. Initial tests up to 130 mph have been successfully completed.*
 - *The monthly QA meeting was held July 6 at Siemens factory. The next meeting is scheduled for August 10.*
 - *All fifteen (15 ea.) DCRs will be processed by the re-established locomotive working group. Rich Stegner will distribute to the locomotive sub-team leaders this week.*
 - *The test plan for 125 mph testing on the North East Corridor was approved by FRA, as submitted by (Maryland MARC Train Service) MARC. MARC/Amtrak are reported processing the test agreement.*
 - *Siemens targets shipping locomotive #4 to Baltimore, next Friday 8/5.*
 - *Each JPE are working out details for pre-revenue test plans, with Amtrak.*
 - *Follow up Technical Advisory Groups (TAG) continue working on an on-going basis for the action items from the AAR Standard vehicle qualification testing and acceptance.*
 - *The locomotive weight was reported in June 2016, at 270,725 lbs (+/-). Based on actual component weights, the locomotive weight has varied little in the last six months. The calculated P2 force is within specified limits.*
- Update: Bi-Level Car Procurement – On 7-28-16 the following update on the Bi-Level car procurement was provided by Caltrans:
- *FAIs –Truck Assembly FAI took place on July 12 in Rochelle. Our Subject Matter Expert reported that it was an excellent FAI with no open issues. The upcoming FAIs are for passenger seat and table, food service cars and ATR/UTR in fall 2016.*
 - *Carshell –We continue to have regular updates from NS to review the progress of the design issues and the schedule for the design activities. The last update meeting was July 25, Monday. Carshell design activities are now proceeding in accordance with the schedule requirements of the supplemental design review in 2017. A number of design refinements have been incorporated into the structure and the Method 2C model has been created. All load cases have been run on this model and the analysis of the results is underway. Any further refinements will be added to Method 2D, which is the final standard model. Briefings were provided on a number of the design updates such as material changes, plate thickness increases and additional webs.*
 - *Testing –The seat/table dynamic tests took place on June 30 & July 1. While some tests were successfully completed, there are still a few open items that need to be discussed and worked out between Caltrans, NS, and Kustom Seating. We are hoping to resolve all issues by fall. We will schedule seat and table FAI after all issues have been closed.*
 - *Misc. – Program Management Plan Audit took place on July 13. Nippon Sharyo (NS) was well prepared. We spent a lot of time on risk management. We were able to close about half the audit items based on the evidence that NS presented during the audit. NS agreed to revise the plan by the end of August to close the rest of the open items. The QA meeting, which took place on July 14, also went well. NS was the most prepared that they have ever been. Overall, they have made good progress since our last meeting, and were able to present quite a bit of quality data from the pilot car build. The next QA date was set for October 6. At that time, we will do another CDRL Element Audit. Our Quality system records audit went well with a minimal number of minor findings.*
- Review of the Bi-Level Car Specification C.4 proposed changes: The Review Panel has completed its work and has submitted its report along with a recommendation to adopt Revision C.4 to the NGEC Executive Board. The Board will consider adoption on 8-2-16.
- AAR Committee: The committee is making progress within the 6 sections or subgroups with about 90% draft completion. In particular, the VTI group has two key outstanding issues yet to be resolved. Once resolved the first draft will be ready for public review. Next update: 8-11-16.

- Technical working groups Review/Update of the three PRIIA Single Level Specifications (car, trainsets, DMUs): On 6-16-16 Mario Bergeron directed the technical working groups to organize to begin a review/update of the aforementioned specifications once the Bi-Level Car Specification Revision C.4 has been formally adopted. The working groups will review the Bi-Level changes as applicable to the single level specs and also look at other proposed DCRs for inclusion in updated specification revisions.

As of 7-28-16, Tammy Krause has reached out to working group team leaders to re-affirm their continued interest in staying on as team leaders. All have agreed to stay on, and the team leaders have outreached to the members of their respective working groups to ascertain their continued involvement.

Tammy Krause has also prepared a description of the technical working groups and an invitation to all technical subcommittee members and industry participants to join the teams. Steve Hewitt has disseminated the description and invite to all members of the Technical subcommittee and industry participants encouraging their involvement. Thus far 7 industry members have contacted Tammy expressing interest in participating on one or more working groups. Once team leaders have compiled the list of members, Tammy will include the additional members and disseminate the list for each working group to Steve Hewitt for distribution.

- Updating ECP Standards: This is an ongoing action item which the Technical subcommittee is tracking – it is anticipated that status updates will take place once a month.
- On 7-14-16, Paul Jamieson provided the following update:

The testing schedule has been delayed due to issues identified during the internal testing between NYAB and Wabtec. The new dates, subject to equipment and track availability, are as follows:

- *Training materials review – July 21*
 - *Amtrak Training - TBD*
 - *Interoperability Test – September 27 and 28*
 - *Static Train Test – Week of October 17*
 - *Dynamic Train Test – Week of October 23*
 - *Train will be returned to emulation service immediately following the dynamic test*
 - *ECP Revenue Service Release – Anticipated Week of November 29 pending FRA approval*
- The total delay is approximately 6 weeks from the previous schedule.*

The Finance and Administrative Subcommittee

Chair: Darrell Smith, Amtrak CFO

Vice Chair: Brent Thompson, Washington State DOT

Vice Chair: Ray Hessinger, New York State DOT

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

During the Month of July, 2016, the Finance and Administrative Subcommittee (FASC) held its monthly meeting on 7-27-16.

Key decisions and action item updates from the meeting included:

- Preparing for the No Cost Grant Agreement Extension Request:

- a. Darrell Smith provided an overview of the proposed NGEC - FRA Grant Agreement No-Cost Extension Reverse Calendar. Darrell noted that the calendar has been worked out with Amtrak's Grants Department and that it allows for a "worst case" scenario in terms of timing with the FRA.
- b. Darrell reported that "two or so" Executive Board meetings ago he requested that the Chairs of the standing subcommittees take a look at their current and anticipated budgets. He expects that the current budgets will not change much going forward with the possible exception of the Technical subcommittee which is beginning the process of reviewing/updating all of the NGEC specifications. Doing so requires work by the Review Panel consultant Larry Salci. Therefore, the request is to determine what the anticipated costs will be going forward and, is the current budget adequate for the work ahead.

Ultimately, it was agreed that on its first conference call following Labor Day, Darrell will provide an update to the Executive Board on the Reverse Calendar, and will remind subcommittee chairs about the budget assessment that has been requested.

- Legislative Outreach Task Force – developing a strategy and implementation plan to obtain future federal funds for the NGEC: Each state member and Amtrak is to work with its Government Affairs office and ask that the two pager (currently being finalized) be included in its package during Hill visits to keep the NGEC on Congress' radar even though we are not yet ready to ask for more money.

A "regular update/report card/dash board" will be developed through the NGEC Legislative Task Force with the intent that it be provided to Congress through the states and Amtrak Government Affairs Offices as a means of continuing the outreach and education on the activities of the NGEC.

The first such update will be the "two-page" educational document being finalized by MO DOT for Executive Board approval. Siemens industry has agreed to take photos of the new Charger locomotive and to provide them to Eric Curtit to consider two for insertion into the document.

- Responding to VIA Rail Request: Steve Hewitt drafted draft a proposed response to the VIA Rail request, it was approved by the FASC and accepted subsequently by the NGEC Executive Board on 6-8-16. The letter was sent to VIA Rail, and a response thanking the NGEC for authorizing the use of the spec, and inviting VIA Rail to participate as a member of the Industry group on the Technical subcommittee was sent immediately by VIA Rail. VIA Rail has agreed to keep the NGEC apprised of any changes it may make, and, generally provide feedback. They have not yet decided whether or not to become industry members, but, once Bi-Level Spec Revision C.4 has been adopted, (it is anticipated to be adopted by the Board on 8-2-16) Steve Hewitt will contact VIA Rail to inform them of the revisions and ask again about joining the industry group.

The 514 Subcommittee:

Chair: Brian Beeler II – NNEPRA (Maine DOT)

Vice Chair: Jonathan Dees - NCDOT

The 514 Subcommittee holds monthly conference calls on Mondays at 4:00PM Eastern.

On 7-19 -16, Brian Beeler II, was unavailable, and the 514 report was tabled until the next Board conference call – 8-2-16.

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 particular specification is re-convened by the Executive Board chair.

The Bi-Level Car Technical Specification Review Panel met on July 21, 2016 to and approved the Panel report with recommendations prepared by consultant Larry Salci. The approved report was sent to the NGEC Executive Board and will be considered for adoption on 8-2-16.

Note: Special thanks to Dr. John Tunna, FRA, for his contributions to the success of the NGEC. Dr. Tunna has served as the FRA's representative on each of the Technical Specification Review Panels since their establishment. His expertise and insight have been invaluable to the NGEC. Dr. Tunna recently announced his upcoming retirement from FRA, and consequently his service to the NGEC as well. He will be greatly missed. On behalf of the NGEC members, I want to congratulate John, and to extend our wishes for a happy and healthy retirement – all the best!

***Steve Hewitt
NGEC Support Services Manager***