

Report of the Technical Subcommittee

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Activities of the Tech Subcommittee

- Establishment of the subcommittee
- Process for specification development
- Activities undertaken by the committee in the last year
- Current activities
- Plans for the coming year

Establishment of the Subcommittee

- The NGEC decided in its byelaws on the need for a technical subcommittee in January 2010
- The role of the subcommittee was to initially take leadership on the development of technical specifications and then deal with all issues of a technical nature facing NGEC
- Deliver the specifications identified by the NGEC against the dates set
- The core team is made up of the FRA, the states and Amtrak
- Coordinate the involvement of all interested industry members in the development process
- Reconcile the various goals set out for the NGEC as they relate to the content of specifications



Processes for Specification Development

- Conference calls were held to organize structure of subcommittee
- Opening industry forum in April 2010 with 150 attendees
- Subgroups formed for individual technical areas
 - Mechanical - Jeff Gordon
 - Structural - Eloy Martinez/Anand Prabhakaran
 - Locomotive - Steve Fretwell
 - Electrical - Tammy Krause
 - Interiors - Andrew Wood
 - VTI - John Tunna/Brian Marquis
- Volunteers stepped forward to work on subgroups
- Subgroups met on a regular basis to determine the content of specifications in their specialist areas
- Technical subcommittee continues to hold regular conference calls and remains very active

Specification Process (cont.)

- A requirements document for each vehicle type was provided from the Executive Board
- Subgroups provided their input for the relevant sections of the specification based on a strawman document (originally Caltrans C21 specification)
- All input is provided to Amtrak staff and supporting specification writer
- Consolidation process raises questions on the input received. Amtrak staff interface with subgroup leaders to resolve these issues
- Draft specification compiled and put on the NGEC website
- Opportunity for everyone to review all of the spec – not just the elements they had worked on
- Specification further updated based on industry comments

Specification Process (cont.)

- Final draft placed on the website
- Meeting of the full technical subcommittee scheduled
- Industry members can submit final questions and suggestions. These are reviewed at the meeting and a final decision made by Amtrak specification team and relevant subgroup leader
- Vote taken on the acceptability or otherwise of the specification
- Once approved, the specification is forwarded to Executive Board for approval
- Executive Board appoints review panel to evaluate the specification against the requirements document
- Review Panel makes recommendation to the Executive Board
- Executive Board votes on acceptance or otherwise of the specification

What has the Subcommittee Done This Year?

- Three specification goals were set for the subcommittee by the NGENC
 - Bi-Level car specification by end of July 2010
 - Single Level car specification by end of December 2010
 - High speed diesel-electric locomotive by end of December 2010
 - Commencement of a trainset specification
- All of these dates were met*
 - The timeline was aggressive
 - More effort was required than originally anticipated
 - It would not have been possible without the huge contributions of industry members
 - The technical documents produced are of a high quality
- The next goal is to get acquisition programs underway to justify the investment industry has made

Additional Tasks Undertaken

- Commencement of creation of a systems engineering process
- Definition of what is required for standardization
- Position papers on key technical issues
- Projection of future developmental opportunities
- Further investigation of the potential demand for equipment types

Current Activities

- Finalization of the diesel-electric locomotive specification
 - Specification developed from scratch by the team
 - Review panel identified issues with structure and format
 - Technical content has broadly met the goals
 - An update is currently underway and approval is now set for mid-March 2011
- Development of the trainset specification
- Progression of the standardization policy
- Development of the systems engineering policy
- Provision of support to states in the development of their rail planning
- Determination of the approach to other equipment types

Plans for the Coming Year

- Completion of the specification tasks identified previously
 - Diesel-electric locomotive
 - Trainset
- Turn the policy documents developed into working processes
 - Systems engineering
 - Standardization
- Preparation for and support of the first acquisition programs
- Creation of task force to research options for New York dual mode locomotive replacement
- Creation of engineering policies and support strategies for the options under consideration for a corporate entity
- Continue to find ways to ensure the collaborative approach that has been taken with all parts of the industry continues for the future work of the NGEC

Conclusion

- Thank you to many people
 - Industry members for their willing participation and commitment
 - Amtrak staff for their support throughout the process
 - FRA for providing resources and leadership
 - The states for contributing their people and for providing a focus on the underlying needs
 - Everyone for taking challenging targets and delivering against them

Next Generation
Equipment Committee

