2020 NGEC Annual Meeting
Multi-state Single Level Rail Cars Procurement Updates

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California Department of Transportation
CALIDOT Railcar Project History

- Joint Purchase: Caltrans & IDOT
- $352M contract; FRA Funded
- Amended SCOA Contract; Siemens is new carbuilder

- Project restart in Nov. 2017
- Based on AAF Single-level cars; proven and validated
- Best delivery schedule available
- State of the art vehicles, factory
Project Status:

Nearly 50 Coaches in Production, Test & Preparation for Delivery

- 4 Cars at TTCI for Amtrak PTC Brake Testing
- 1 Car in Climate Chamber (Ottawa) for HVAC Validation
  - Will travel to NEC for FRA High-Speed Testing
- 2 Cars Scheduled to Ship to Stockton in February
- Design Review of Coach Cars Complete
- Design Reviews for Cab Car and IDOT Cafe Car Ongoing
- All Submitted PRIIA DCRs Approved
Project Status:

Upcoming Design Reviews

- Cab Area Mockup Viewed in December 2019
- Cab Carshell FDR on February 27
- Cab Car Layout, Electrical & Brakes FDR to follow
- Cab Car Production Start – January 2021
- IDOT Galley FDR Design Release in Process
- Modified High-Level Boarding Concepts in Process
Project Status:

- FAI and Type Testing
- Standard Coach System FAIs in Final Phase
-Closure of Sliding Step and Trap Door Pending
-Complete Coach FAI Action Items In Work
-PTC Brake Testing at TTCI to be Complete in February
-Door Cycle Test at TTCI Complete

-2 TTCI Cars Ship to Stockton After Brake Testing
-2 TTCI Cars Ship to Sacramento for Repair and Completion

Climate Room Testing to be Complete—End of February
Project Status:

Delivery and Commissioning

• First Cars in Stockton End of February
• Onsite Static Testing to Begin March
  - Trainlines, Compatibility, PA/Passenger Info System
• Master Car Wi-Fi Installation to be Scheduled
• Caltrans FRA 238.111 Corridor Testing in April/May
• Training Plans and Manuals Under Review
• IDOT Deliveries Begin May 2020
• IDOT FRA 238.111 Testing in August 2020
Milestones Completed to date (Part I)

- Coach Car Design Review and Mockup
- Coach Car Project Management Deliverables
- Numerous Testing and Technical Deliverables for Coach Car (some additional Deliverables for Cab and Café Cars upcoming)
- Procurement and delivery of components and systems for manufacturing
- Procurement of spare parts and special tools
Milestones Completed to date (Part II)

• Establishment of Warranty Sites
• Implementation of production oversight by Caltrans and IDOT Resident Inspectors
• Ongoing coordination with stakeholders (FRA; NGEC; Amtrak; ADA community; Host Railroads; JPAs in California; Midwest States)
• Complete Coach Car and Subsystem FAIs nearly completed.
Issues We Are Working Through (Part I)

• Quality Concerns
  – Underframe Front Weld Indications
    • Siemens and Component Supplier responded immediately and investigated the findings
    • 31 carshells affected
    • Metallurgical investigation was performed
    • Finite Elements Analysis was conducted
    • New welding procedures have been developed
    • Weld repair and rework procedures are in place
    • Supplier welders and independent inspectors are on-site
    • Based on analysis, there are no negative effects on the fatigue life of the carshells
    • Carshells have been confirmed to last entire design life
Issues We Are Working Through (Part II)

• Agreements
  – Working with stakeholders on various agreements for testing, insurance, site access, commissioning, revenue service
• Café/Vending Cars
  – Investigating options to provide food service on new cars
  – Vending machines have been used successfully in North Carolina
  – Stakeholders concerned about addressing cost of providing food service in current passenger service
• Climate room testing Findings
  – Subsystem failures, repairs and HVAC tuning is ongoing
  – Limited testing time to support troubleshooting
Issues we are working through (Part III)

• Modified Level-Boarding
  – Temporary bridge plates concept in work
  – Car-borne drawbridge/bridge plate designed by Siemens
  – Building Mini-High Platforms on SJ Corridor
    • Station surveys were conducted
    • Project design upcoming to install bolt-on Mini-High Platforms at all stations on San Joaquin Corridor
    • Use wayside wheelchair lifts in the interim until Mini-High Platforms are installed
Next Steps

- Closure of Complete Coach Car FAI and Coach Car Subsystem FAIs
- Complete Type Testing, 213.345 and 238.111 Testing
- Cab Car and Café Car Final Design Reviews
  - Cab Car Structural Testing June/July 2021
- IDOT Business Car Production Begins June 2020
- IDOT Café Car Production Begins October 2020
- Cab Car Production Begins February 2021
- Caltrans Service Rollout Start July 2020
- IDOT Service Rollout Start September 2020
Any Questions?
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THANK YOU!
The NGEC will provide national leadership in standardization, acquisition, financing and management of passenger rail equipment.