

2020 NGEAC Annual Meeting

Multi-state Single Level Rail Cars

Procurement Updates

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Division of Rail and Mass Transportation
California Department of Transportation



The NGEAC will provide national leadership in standardization, acquisition, financing and management of passenger rail equipment.



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



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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



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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



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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

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.



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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!



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Next Generation
Equipment Committee



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