Sumitomo Corporation of Americas

PRIIA 305 Spec New Bi-Level Passenger Railcars Project Progress Update
Sumitomo Corporation of Americas

- Trading and investment business enterprises
- Parent Company: Sumitomo Corporation
  ✓ Established: 1919
  ✓ Total Trading Transaction: $79.8bil
  ✓ Number of Employee: 73,953 (*) Consolidated Basis

Nippon Sharyo

- Rolling stock manufacturer
- Established: 1896
- #1 manufacturer of Shinkansen (Japanese Bullet Train) 3,476 cars as of Dec 2014

Commercial and Contractual Aspects
- Marketing
- Overall Program Management
- Bonding/Insurance
- Transportation
- Commercial & Legal Matters

Technical and Production Aspects
- Design/Engineering
- Purchasing
- Manufacturing
- Testing/Commissioning
- Warranty

➔ 35 years of partnership in North America railcar business
Nippon Sharyo Rochelle Plant

Location: Rochelle, IL
80 miles west of Chicago

Shop 1: Carbody Assembly Shop
Shop 2: Final Assembly Shop
Shop 3: Carshell Components Shop
* Shop 3 Started Operation in July `14

Investment: US$ 100 million
Employees: Approx. 650
Nippon Sharyo Rochelle Plant
New Bi-Level Passenger Railcar Project

<Project Description>

• Caltrans & IDOT Joint Procurement
• 130 Bi-level Passenger Rail Cars with 300 option cars
  • 42 Cars = Caltrans
  • 88 Cars = IDOT and Midwest States

• First PRIIA Specification
  • First standardized, multi-state equipment specification
  • First Bi-Level Passenger Railcar with CEM Feature

• First 100% Buy America
• First ARRA Funded Railcar Procurement Project

• Notice to Proceed: Nov 27, 2012
Current Progress

- Preliminary & Intermediate Design: Completed
- Mockup Review: Completed
- Final Design: 92% Complete
- Carbody Steel Procurement: Completed up to car #39
- First Article Inspection: 18% Complete
- Started Fabrication of Metal Parts: July 2014
- Started Carbody Shell Assembly: September 2014
- Completion of 1st Carshell: June 2015
### Specific Challenges

- **Advanced Technical Spec in Standardization and Technology**
- **Multiple Levels of Oversight/Stakeholders**
- **100% Buy America**
  - Rochelle Start-up
  - Steel Procurement
  - Supply Chain

### Recovery Plan

- Compression of the transition from Pilot Cars to Production Cars

### Future Schedule

<table>
<thead>
<tr>
<th></th>
<th>Original Schedule</th>
<th>Current Schedule</th>
<th>Delay/Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pilot cars (#1-3)</td>
<td>5/30/16</td>
<td>12/14/16</td>
<td>6 1/2 mo</td>
</tr>
<tr>
<td>Car #130</td>
<td>7/5/18</td>
<td>10/14/18</td>
<td>3 mo</td>
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Lessons Learned

- **Standardization and Innovation can be in conflict at times.**
- **Overly-detailed specification may limit equipment choices in a constantly changing supply market.**
- **It is challenging to accurately allocate weight and physical space for a technologically evolving car design.**
- **Resolving ambiguities or contradictions in the specification required much time and effort to resolve.**
- **Areas for discretion of the carbuilder could be further evaluated...**
Thank you

• Caltrans and Illinois DOT
• Midwest Coalition
• FRA
• NGEC and the PRIIA 305 Committee
• Industry Representatives

Goal: Supply quality cars that satisfy all parties involved