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July 23, 2020

Mr. John Johnson
Attorney Advisor
US Department of Transportation
Federal Railroad Administration
W31-208
1200 New Jersey Ave, SE
Washington, DC 20590

CAL-FRA# 029

Reference: N/A

Reply Req'd: Y

Dear Mr. Johnson

Subject: Buy America Waiver Request for Caltrans and IDOT Passenger Railcar Procurement ("CALIDOT") Workstation Tables, for Contract No. 75A0362

Caltrans and the Illinois Department of Transportation (CALIDOT) respectfully request a waiver to provisions of the Buy America Act (49 U.S.C. § 22905) applied to a portion of the total number of passenger workstation tables to be installed in the new CALIDOT single level railcars because of implications resulting from continued travel and work restrictions due to the COVID-19 pandemic. These new vehicles are being purchased from Sumitomo Corporation of America (SCOA), manufactured by Siemens Mobility (Siemens) with funding from multiple FRA/Caltrans/IDOT rolling stock grants/cooperative agreements. The workstation tables are not only a popular passenger amenity but also a crucial safety feature for open-bay seating areas within the coach car. The workstation table cost constitutes less than [REDACTED] of a \$370.7M joint procurement contract.

The CALIDOT Single Level Coach Car design is based on the Siemens Venture Coach Car platform first implemented on Brightline in Florida, which included installed workstation tables supplied by a United States (US) manufacturer compliant with Section 9.6.2.3 of the PRIIA (Passenger Rail Investment and Improvement Act of 2008) 305-003 Rev A Single Level Passenger Car Technical Specification. Brightline entered passenger service in early 2018. Although the table design meets PRIIA 305-003 requirements and 49 CFR Part 238, Section 233: Interior Fittings and Surfaces, providing a good level of safety, it does not fully meet the APTA Standard for Workstation Tables published in 2013 (APTA PR-CS-S-018-13), which has added requirements for energy absorption and improved protection against human abdominal injury. SCOA/ Siemens and CALIDOT made best efforts to modify the design to achieve compliance with the APTA workstation table standard in conjunction with the FRA and Volpe Center. After additional testing efforts, the Brightline table failed to meet the APTA standard and a new development was started. Production was halted after building 77 tables for CALIDOT. As a result, a new table development project was initiated and the original contract for the

Brightline style workstation tables terminated, ending the production of the original CALIDOT tables.

To address the new technical and schedule challenges, SCOA/Siemens conducted an extensive inquiry of suppliers who could either meet the APTA Workstation Table Standard with an existing design or develop a completely new table. Unfortunately, a domestic table supplier with the proven passenger rail interior component modeling and structural simulation expertise was not found. Extending the search globally, an experienced supplier with the capability to develop and provide fully compliant tables was found in the United Kingdom (UK). Baker-Bellfield, LLC in the UK was chosen to provide compliant workstation tables. Although a compliant Buy America localization plan was developed, reviewed by FRA and initial steps taken for a production facility in Sacramento near the Siemens' facility, the Coronavirus pandemic stopped the localization efforts entirely in March 2020.

This waiver request is aimed at allowing 40% of the workstation tables (238 tables) to be purchased directly from this UK supplier until a US-based facility (US subsidiary of Baker-Bellfield, LLC) can be operational to supply the remaining tables¹. **Due to the impact of travel and work restrictions resulting from the COVID-19 pandemic, all of the tables simply cannot currently be manufactured per the original plan including component production in a US facility and delivered within a reasonable time to meet vehicle production schedules.** A summary of the new table supplier's efforts being taken to comply with Buy America provisions are detailed in Attachment A.

Production Impact Attributed to COVID-19 Pandemic & Mitigation Measures

Caltrans and IDOT were initially notified by Siemens on 2/10/2020 and 3/13/2020 that the CALIDOT project is currently being affected by the COVID-19 global pandemic. Continued uncertainty exists today. While Siemens is proceeding with production of the carshells and the final assembly of the completed cars on a limited basis as an essential business under California regulations, not all suppliers have been able to do the same.

Baker-Bellfield's US localization plan outlined herein could not progress due to a Force Majeure brought about by the COVID-19 pandemic. The resulting travel bans for Europeans entering the US (which went into effect at midnight on 3/13/2020), shelter in place orders, material supply chain disruptions, additional restrictions in California and the US (in general), the COVID-19-related closures at Baker-Bellfield in the UK, and closures of the essential test facility needed for qualification of the table have and continue to delay availability of the new US produced tables. Currently, the earliest possible table performance test date is the week of August 17, 2020, which is **currently over four months later than originally planned.**

The FRA requirements for Buy America and full APTA Workstation Table Standard compliance cannot be met simultaneously under the current conditions without serious production delays and contractual and cost implications. These conditions present Siemens with the following mitigation measures:

¹ Based on the assumption that COVID-19 Federal travel restrictions are lifted by the end of year 2020, and that first US production of workstation tables begins May 1, 2021 – See Attachment B.

- a. To deliver Siemens' contractual commitments to SCOA and SCOA/Siemens' contractual commitment to Caltrans and IDOT, a hybrid approach for manufacturing is proposed. Under this scenario, the first batch of tables would be manufactured entirely in the UK, followed later by localization of manufacturing to the new Sacramento facility for production of the remaining tables, once COVID-19 work and travel restrictions have been lifted or clarified and production preparations are underway. This approach is the only feasible path that provides the latest APTA-compliant workstation tables to the CALIDOT project in the time needed to meet railcar production and contractual requirements.
- b. Although the phase-in point for Buy America-compliant tables cannot be accurately determined due to the pandemic (best estimate would be a start of production in 2021), the project is targeting to manufacture 60% of the total number of tables in the US. However, initial tables will need to be sourced from the established manufacturing plant in the UK to support current CALIDOT production, delivery, testing, commissioning and revenue service schedules. These tables will be installed on the cars currently in production at Siemens in Sacramento. This risk mitigation measure is critical for project success as it is unknown when restrictions will be lifted. See Attachment B for a forecast of key dates associated with US production of workstation tables and quantification of tables expected to be produced in the UK.
- c. For cars already delivered, or now moving through the production process, soon to be delivered to Caltrans or IDOT, tables of the Brightline design, of which there are 77 made prior to cancellation of the contract with the table supplier, are enough to be installed into 16 railcars as a temporary measure until tables from the new supplier are available to replace them. Installation of these tables will meet the current PRIIA 305 003 Rev-A specification requirements and 49 CFR Part 238, Section 233 and allow formation of three train consists to enter revenue service according to contractual schedule requirements. These tables are only temporary and will be replaced by the new compliant design once available. After that, there are no more workstation tables available until the Baker-Bellfield tables are produced. There are 137 railcars in this overall procurement.

Supporting Justifications

Caltrans and IDOT provide the following information to assist FRA in its analysis and response to this Buy America waiver request:

- a. Passenger Safety:
 - i. CALIDOT's position is that new passenger equipment cannot enter revenue service without workstation tables placed between open-bay facing seats because of the known safety risks associated with accidental railcar collisions. Passengers sitting at workstation table areas would benefit from the safety improvements achieved with the latest technological advancements in table design.

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- ii. Installing APTA-compliant workstation tables in the CALIDOT coaches will be a significant achievement for passenger safety for the latest generation of single level rolling stock equipment. Granting a waiver would encourage this outcome at the earliest possible delivery and further facilitate the availability of the vehicles into revenue service.
 - iii. Siemens, Baker-Bellfield, and the CALIDOT project team have worked with the Volpe Center to ensure that the development of the workstation table applies the latest modeling technology and meets safety requirements. The result will be a design compliant with the newest APTA Workstation Table Standard.
 - iv. All CALIDOT passenger railcars will ultimately be outfitted with fully APTA compliant workstation tables. The vehicles delivered with the original 77 Brightline tables will be replaced with the new fully compliant design as soon as possible. Granting of this waiver accelerates the conversion to new tables.
 - v. The waiver would help mitigate the negative effects of the COVID-19 Force Majeure condition by allowing the updated fully compliant tables to be installed as quickly as possible, which will maximize passenger safety, minimize implementation impacts and overall costs, and mitigate schedule issues for delivery and revenue service availability.
- b. Project Cost and Schedule Implications
- i. Without the Baker-Bellfield tables produced in the UK, the vehicles now being manufactured could not be used for revenue service and would need to be stored at Caltrans and IDOT commissioning sites waiting for the availability of new tables:
 - This is potentially a large loss in investment for Caltrans, IDOT, and the FRA – who has funded much of the procurement of the CALIDOT Railcars;
 - The cost of storage is estimated to be variable, becoming higher as the number of cars needing storage increase and the remaining storage spaces decrease. For IDOT, costs are estimated to be \$39,000 per year (subject to site selection and owner's confirmation) for storage of up to 40 IDOT Venture cars for a maximum of one year. At the ACE facility in Stockton, California, the San Joaquin Regional Rail Commission (SJRRC) will charge Siemens \$250 per day per railcar for storage of cars not in revenue service. These costs do not include the costs for delayed manufacturing, retrofitting existing cars, delays to revenue service, and lost warranty time.

- Railcars would not be eligible for Conditional nor Final Acceptance milestones which would incur a significant cashflow burden on SCOA and Siemens for Work-In-Progress (WIP) while continuing to pay material and subcontracted suppliers;
- Railcars may experience potential lost warranty time for conditionally accepted railcars that cannot be put into revenue service;
- Storing railcars significantly reduces the timeliness and value of this FRA funded program to the American public;
- Caltrans and IDOT will experience increased rolling stock maintenance and lease costs related to continued use of Amtrak equipment to provide passenger service on the impacted corridors, and;
- Public perception related to unplanned delays and storage of new railcars that were expected by stakeholders and passengers now sitting idle in Amtrak and San Joaquin Joint Powers Authority (SJJPA) storage.

c. Alternative Manufacturer Consideration

- i. An alternate manufacturer (prior to Baker-Bellfield) had been identified, who had provided tables for a transit operator. However, after a detailed technical review, there was a very low likelihood the table would meet APTA Workstation Table Standard requirements for use in the PRIIA Single Level railcar due to incompatibility with the vehicle construction interfaces.
- ii. Caltrans/IDOT experienced first-hand these struggles with the same table concept during several rounds of testing during the previous bi-Level procurement in a similar application. This table design would need significant modifications to major components for vehicle interface support system and would be anticipated to have a negative impact on safety features of the design, making it much more difficult to design a compliant table.

Summary and Consideration

Caltrans and IDOT understand the importance of the FRA's Buy America requirements and are considering achievable problem-solving efforts in working with SCOA, Siemens, and FRA to ensure that the CALIDOT Railcars meet these requirements. As outlined above, the unique circumstances of the COVID-19 pandemic have made it and continue to make it extremely challenging and potentially costly to maintain project delivery and revenue service schedules while at the same time installing all workstation tables that meet Buy America requirements. As such, Caltrans and IDOT respectfully request that the FRA consider granting our waiver petition for Buy America requirements of the workstation table component and its subcomponents for the CALIDOT Railcars as outlined herein.

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Additionally, it should be understood that Caltrans, IDOT, SCOA, and Siemens may need to request further reconsiderations on the number of tables to be manufactured in the UK if conditions related to COVID-19 continue to be unpredictable or present further obstacles.

Caltrans and IDOT would like to emphasize that SCOA/Siemens have and will continue to use their best efforts with the supplier to expedite the localization of the table production to the US.

Please let me know if you have any questions. I can be reached at (916) 657-4727.

Sincerely,

Momoko Tamaoki

Momoko Tamaoki, Chief,
Office of Assets and Equipment

c: Jennifer Bastian, IDOT
Melina Lopez, IDOT
Linda Martin, FRA
Jeff Gordon, FRA
Melissa Hatcher, FRA

Attachment A – New Table Supplier Development Efforts

The new table supplier, Baker-Bellfield LLC, a corporation headquartered in Telford, United Kingdom (<https://bakerbellfield.co.uk/>) has unique expertise in designing workstation tables and other railway interior components. Baker-Bellfield has been contracted to develop, test, and manufacture a new workstation table for the CALIDOT project, complying with the newest APTA Workstation Table Standard (APTA PR-CS-S-018-13). Tables of this new design will provide an improved level of passenger safety in the single level passenger rolling stock vehicles.

As a guide to meeting Buy America requirements for this project, the Buy America Manufacturing Process Flow Chart shown below was used to define the approach and conditions supporting this petition for a waiver. The approach shows that the tabletop with sliding trays will be made in the UK, and the balance of the subcomponents (table leg assembly, wall bracket assembly, and other hardware) will be manufactured in the US. The final assembly will occur in US at the Siemens facility in Sacramento.

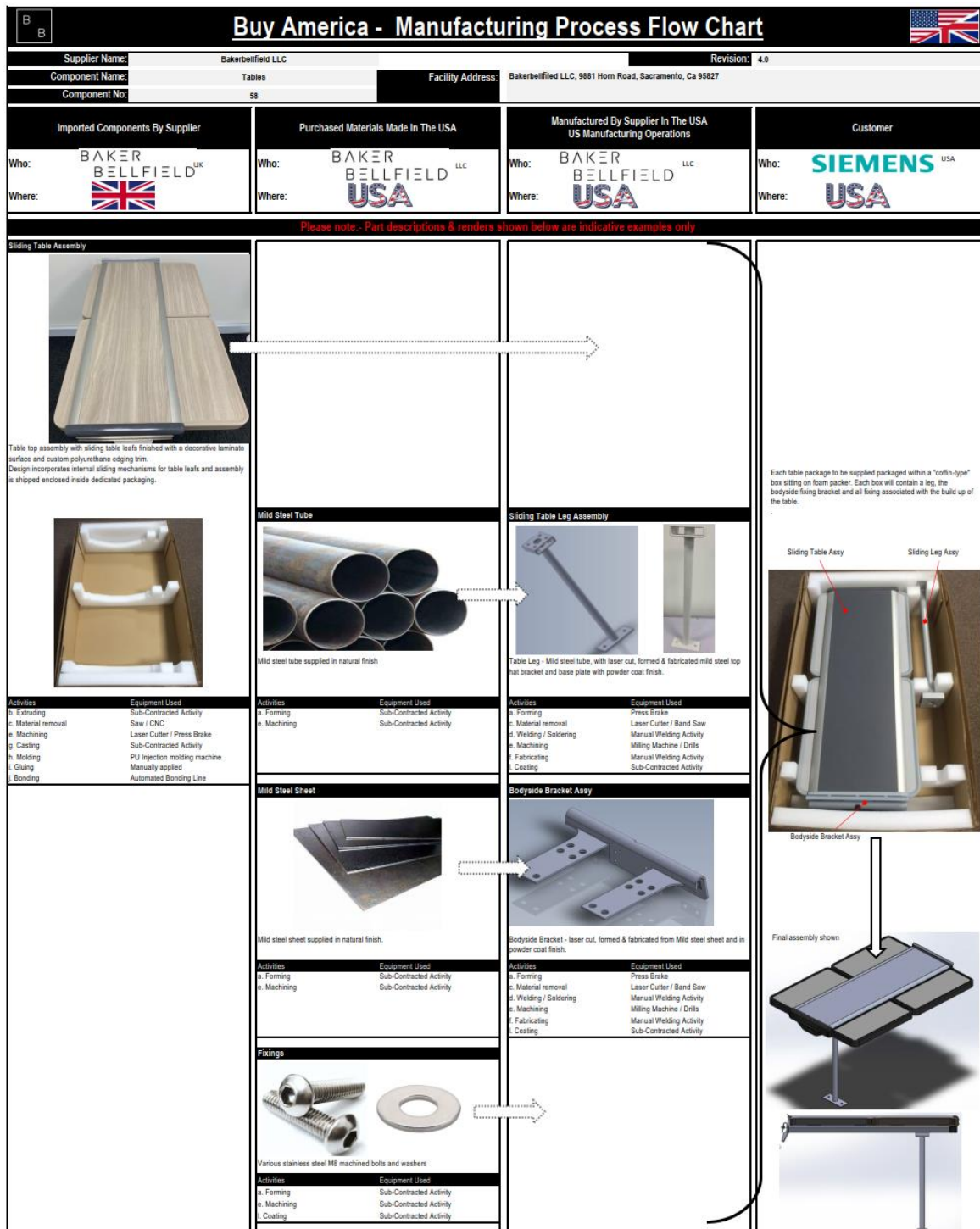
Understanding the lengthy timelines involved and the absolute need for Buy America compliance, Baker-Bellfield has already begun the process establishing US presence by signing a property lease for their US production facility dedicated to manufacturing these tables. Baker-Bellfield also shipped a container with equipment/ machinery from the UK to the US and applied for an investor visa. The timeline for the visa is unknown as processing capacity by United States Citizenship and Immigration Services (USCIS) is significantly reduced due to the pandemic. Travel and workplace restrictions have and continue to cause substantial delays due to limited availability of staff needed to receive, transport and install equipment to establish a Buy America site. Similarly, US staff recruitment and training, sub-supplier identification and qualification efforts have been on hold and may experience additional delay for an undetermined length of time until restrictions are lifted or clarified.

All other planned localization activities needed to manufacture the tables in Sacramento have been delayed. Based on the original localization schedule, Baker-Bellfield would have performed the following steps for setting up the Buy America site, starting the week of March 9, 2020. These steps remain:

- Manufacture/assembly set-up and line production;
- Customer FAI and accommodation of changes resulting from FAI;
- Manufacture first batch;
- Labor retention - product assembler interviews and product quality training;
- Supplier approvals and quality audits;
- Instruction by Manufacturing Technology Centre;
- Fork-Lift truck safety training;
- Implementation of QMS;
- Internal quality/process audits; and,
- Implementation of factory master Material Resource Plan (MRP).

These delays have a direct impact on the delivery of the workstation tables to Siemens for installation into vehicles, and the delay cascades to vehicle production and delivery schedules important to the CALIDOT procurement contract. **The tables simply cannot be currently manufactured per the original plan including component production in the US facility and delivered within a time supporting CALIDOT revenue service expectations.**

Buy America Flowchart



Attachment B – Key Quantification of Production Schedule Dates and Number of Workstation Tables Anticipated for Production in the UK

The inherent unpredictability of the COVID-19 pandemic and the responses of national governments in response to the pandemic make it challenging to precisely plan when the Baker-Bellfield (B-B) facility can be opened in Sacramento and when the domestically manufactured tables can begin to be produced. To address this situation, Caltrans/IDOT have made reasonable assumptions based on known facts and data to produce an estimated schedule to begin manufacturing tables domestically at B-B's Sacramento facility, and the number of tables that will be manufactured in the UK. The assumptions are as follows:

- COVID-19 travel restrictions will not be lifted until January 1, 2021. This is based on the existing Federal Government travel restrictions currently in place which are ongoing through the end of 2020;
- At the end of travel restrictions, it will take B-B four months to establish their Sacramento facility and send their initial batch of domestically manufactured tables to the Siemens factory. This is based on B-B's prior Buy America timeline presented at the Table FDR in March ("Siemens CALIDOT - Design Technical Document - Issue 03 19-02-2020" page 32):
 - Lease commencement (last completed item) is shown at week 10;
 - Manufacture first batch of tables for CALIDOT is shown to be completed at week 21;
 - Approximately 11-12 weeks, or three months per B-B's timeline;
 - One additional month for travel logistics and preparations to ramp up following the lifting of COVID-19 restrictions;
 - Total time required is assumed to be four months.

Timeline:

Assuming the above, the following timeline will be followed:

- December 31, 2020 - End of COVID-19 travel restrictions;
- January 1, 2021 to January 31, 2021 – B-B Travel Logistics/Preparations (visa requests, travel planning);
- February 1, 2021 to April 30, 2021 – B-B establishment of Sacramento facility and shipping of initial batch of domestically manufactured tables to Siemens facility.

Table Production in the UK:

With the timeframe estimate shown above based on assumptions, it is possible to make an updated estimate of the number of tables that must be manufactured in the UK based on the latest June 2020 CALIDOT Project Master Schedule update. Caltrans/IDOT assume the following:

- All relevant COVID-19 restrictions are lifted as of January 1, 2021;
- First deliveries of tables from B-B Sacramento will begin four months later – May 1, 2021;
- Cars shipped from Siemens before or shortly after May 1, 2021 will need to include tables built in the UK;
- A contingency of extra tables should be provided from the UK to ensure table availability to account for unforeseen problems (delivery delays, damage to tables in shipping, start-up issues at the B-B Sacramento facility).

Based on these assumptions, tables for the following cars would need to be shipped from B-B UK:

- Caltrans Cars:
 - 7 CT-1Bs
 - 11 CT-1As
 - 3-car contingency to provide buffer to ensure continued table availability
 - Total of 21 Caltrans cars
 - Total of tables for Caltrans is 168 (8 tables per car)
- IDOT Cars:
 - 20 ID-1As
 - 12 ID-1Bs
 - 3-car contingency to provide buffer to ensure continued table availability
 - Total of 35 IDOT cars
 - Total of Tables for IDOT is 70 (2 tables per car)
- **Total number of tables needed from the UK would be 238, or approximately 40 percent.**

This schedule may change as the circumstances surrounding COVID-19 restrictions and timelines change.