September 24, 2015

Ms. Rebecca Harnagel,
California High-Speed Rail Authority
770 L Street, Suite 620 MS 2
Sacramento, CA 95814

Letter No.: **JACA1501**

Subject: **Response to RFEI HSR#15-02**

Dear Ms. Harnagel,

We, Japan California High Speed Rail Consortium (hereinafter referred to as "JCHSRC") are pleased to submit our response to the Request for Expressions of Interest for the Delivery of an Initial Operating Segment RFEI HSR#15-02 dated June 22, 2015, including our recommendation of delivery strategy.

We look forward to meeting you at your earliest convenience for a one-on-one meeting to further elaborate on the details that we submitted herein, including certain concerns and/or constraints for mutual solutions.

If you have any questions or comments regarding our EOI submission, please feel free to contact me, at +81-3-5166-3407 or email at *toshiyuki.tsukamoto@sumitomocorp.co.jp* (with cc e-mail to Mr. Takahiro Sato, at +81-3-3435-6949 or email at *sato_tk@khi.co.jp*).

Sincerely,

[redacted]

Toshiyuki Tsukamoto
Assistant General Manager
Transportation System & Infrastructure Business Dept.
Sumitomo Corporation
On behalf of JCHSRC

Attachment: Response to RFEI

Response to RFEI

1. Team Structure

JCHSRC is composed of six leading Japanese companies of the railway industry: Kawasaki Heavy Industries, Ltd., Mitsubishi Heavy Industries, Ltd., Nippon Sharyo, Ltd., Hitachi, Ltd., Mitsubishi Corporation and Sumitomo Corporation. East Japan Railway Company (JR East) supports JCHSRC with its experience and expertise of high speed rail operation. The information of each company is submitted in Appendices to this document.

2. Expression of Interest

1) JCHSRC is very interested in Design-Build for Rolling Stock and Wayside E&M System (Communications, Signaling, Traction Power & OCS, OCC, Warning System, SCADA, CCTV, Direct Line Telephone System and Passenger Information System) of California High Speed Rail Project.

2) Furthermore, JCHSRC has intention to transfer or support technical know-how of JR East for Operation & Maintenance for safe and reliable operation with rich experience of High Speed Rail operation.

3. Project Approach

3.1 Recommendation

JCHSRC recommends the following delivery strategy:

(1) Design-Build for Rolling Stock and Wayside E&M System for IOS-North and IOS-South should be one contract package (hereinafter referred to as the "Proposed Package");

(2) Design-Build-Maintain for Civil Works should be separated from the Proposed Package; and

(3) Appropriate and secured milestone/progress payment for the Proposed Package should be applied.

3.2 Rationale for recommendation

(1) Combination of Rolling Stock and Wayside E&M System

a) The safety and reliability of high speed rail has been developed and achieved as a total integrated system combining Rolling Stock and Wayside E&M System. An application of the proven integrated system reduces works for verification and validation and mitigates associate risks including technical integrity and program.

b) There are many design interfaces between Rolling Stock and Wayside E&M System, such as signaling and communication system, and sensitive design integration is required. Insufficient interface information in the tender stage due to separate contracts results in higher bidding price with contingency to cover unforeseen situation in the contract execution stage.

c) The various interface coordination and system integration between Rolling stock and Wayside E&M system could be included in the Proposed Package in order to study the proper interface for tendering purposes. Therefore, the time of discussion about the interfaces and the associated risks are dramatically decreased after the contract award. As a result it is possible to shorten the schedule and reduce the cost.

d) The single contractor under the Proposed Package is responsible for the interface coordination and system integration among systems included in the Proposed Package. However, if the contract is split, the interface coordination and system integration between Rolling Stock and Wayside E&M System will be the responsibility of Authority, and the Authority needs to handle and resolve discrepancies or shortfalls between the contractors who may seek change order and/or extension of time due to discrepancies or shortfalls related to interfaces. In the worst case, it may possibly lead to legal issues and result in delivery delay and/or penalty payment. Therefore, the single contract under the Proposed Package will relieve the Authority from duties derived from the interface between Rolling Stock and Wayside E&M System.

(2) Appropriate and secured milestone/progress payment

For the payment of the Proposed Package, secured milestone/progress payment would be preferred for Design-Build for Rolling Stock and Wayside E&M System since such works shall be surely secured without any delay and suspension of construction and procurement works of Rolling Stock and Wayside E&M System in order to ensure the timing of the commencement of the operation.

3.3 Independent contract from Civil Works

(1) Wayside E&M System and Civil Works are completely different industries and are of a completely different nature, and evaluation criteria is also different. It seems to be difficult to decide the best team and best value consisting of different nature and industries.

(2) Design-Build cost for Civil Works is much higher than that of Wayside E&M System and has greater weight in price proposal if Wayside E&M System and Civil Works are combined into one package. Because Civil Works is such a large part of the package, it may not lead to the selection of the best high-speed rail system for California.

(3) There are a lot of installation interfaces between Wayside E&M System and Civil Works. However, design interfaces between Wayside E&M System and Civil Works have less complexity and criticality than those between Rolling Stock and Wayside E&M System. Therefore, subjects of design interfaces between Wayside E&M System and Civil Works are easier to be solved. As in other projects, it is recommended from the view point of efficient construction that the installation design and program of Wayside E&M System are incorporated in the Civil Works design, by timely interface coordination.

3.4 Maintenance

JCHSRC will respond about maintenance after the operational regime and the operation plan are provided.

Appendix A
Brief Profile of Members of JCHSRC

Kawasaki Heavy Industries, Ltd.

Together with about 100 group companies in Japan and overseas, Kawasaki Heavy Industries, Ltd. forms a "technology corporate group" in the world. Kawasaki's technological capabilities send diverse products forth into wide-ranging fields that go beyond land, sea, and air, extending from the ocean depths to space.

Rolling Stock is one of Kawasaki's core businesses since1906.

Kawasaki is recognized worldwide as a leading railcar manufacturer from commuter, subway, bi-level coach to high speed train. Manufacturing of high-speed train such as the well-known Shinkansen leverage advanced technologies.

Kawasaki delivers products to customers all over the world. In Taiwan, Taiwan High Speed Rail project is a great success as Kawasaki's representative high-speed rail project of foreign countries. Another experience of overseas supply of high- speed rail train is high-speed EMU of 200kmph for Ministry of Railway of China.

In the United States, Kawasaki's operation is well organized by demonstrating the excellent over 30 year's past experience, and Kawasaki team up with and utilizes three (3) manufacturing facilities which are located in Yonkers (New York), Lincoln (Nebraska) and Kobe (Japan).

Mitsubishi Heavy Industries, Ltd.

Mitsubishi Heavy Industries, ltd. has supplied a wide variety of transportation systems, such as High Speed Rail and Automated People Movers, over the past 30 years. These systems have been safely, reliably, and efficiently transporting hundreds of millions of passengers worldwide.

Nippon Sharyo, Ltd.

Nippon Sharyo is one of the major railcar manufacturers in Japan. It designs, manufactures and delivers, with 119 year experience, various types of rail cars, such as high-speed train, commuter train and subway train for the worldwide market including the United States.

Hitachi, Ltd.

Hitachi is a total railway system supplier offering rolling stock, traction equipment, signaling, traffic management systems, and maintenance depots. Hitachi delivers social innovations that answer society's challenges with the state-of-the-art technology and proven experience in global markets.

Mitsubishi Corporation

Mitsubishi Corporation is a global integrated business enterprise that develops and operates businesses across virtually every industry including industrial finance, energy, metals, machinery, chemicals, foods, and environmental business. Its current activities spans far beyond its traditional trading operations, from natural resources development to investment in retail business, infrastructure, financial products and manufacturing of industrial goods. In the rail sector, Mitsubishi, through the supply of a broad range of rolling stock and railway infrastructure, contributes globally for the successful delivery of large scale railway projects.

Sumitomo Corporation

Sumitomo Corporation is one of the largest trading and investment companies in Japan and has developed businesses in a diverse range of fields. Transportation is a core business of Sumitomo Corporation and the company has many experiences of supplying several different types of transportation systems, including rail systems. Sumitomo Corporation provides overall solutions in the railway industry throughout the world.

Appendix B
Brief Profile of East Japan Railway Company (as a supportive party for JCHSRC)

East Japan Railway Company

JR East is one of the largest passenger railway companies in the world, operating both conventional rail and High Speed rail (Shinkansen) in eastern Japan, and serving about 17 million passengers a day. JR East operates 12,400 trains a day on approximately 7,500km rail networks (Shinkansen network:1,500km, 337trains/day). The maximum operation speed of Shinkansen is 320km/h.