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Bill Lockyer, Director of Finance Ana Matosantos,
9 *Acting Secretary of Business, Transportation and*
Housing Brian Kelly and State Controller John
10 *Chiang*

11 SUPERIOR COURT OF THE STATE OF CALIFORNIA

12 COUNTY OF SACRAMENTO

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15 **JOHN TOS, AARON FUKUDA; AND**
16 **COUNTY OF KINGS, A POLITICAL**
17 **SUBDIVISION OF THE STATE OF**
CALIFORNIA,

18 Plaintiffs,

19 v.

20 **CALIFORNIA HIGH SPEED RAIL**
21 **AUTHORITY; JEFF MORALES, CEO OF**
22 **THE CHSRA; GOVERNOR JERRY**
23 **BROWN; STATE TREASURER, BILL**
24 **LOCKYER; DIRECTOR OF FINANCE,**
25 **ANA MATASANTOS; SECRETARY**
(ACTING) OF BUSINESS,
26 **TRANSPORTATION AND HOUSING,**
BRIAN KELLY; STATE CONTROLLER,
27 **JOHN CHIANG; AND DOES I-V,**
INCLUSIVE,

28 Defendants.

Case No. 34-2011-00113919

DECLARATION OF FRANK VACCA

Date: May 31, 2013

Time: 9:00 a.m.

Dept: 31

Judge: Hon. Michael P. Kenny

Trial Date: May 31, 2013

Action Filed: November 14, 2011

1 I, Frank Vacca, declare as follows:

2 1. I am the Chief Program Manager. My job responsibilities include the development,
3 management and planning and Integration of the Project Delivery for the California High-Speed
4 Rail Authority (hereinafter "Authority"). The functional areas under my responsibilities include
5 right of way, environmental, planning, and integration and project delivery. I have 37 years of
6 experience in railroad engineering. I have undergraduate and graduate degrees in Civil
7 Engineering and have held executive engineering positions with Amtrak as Chief Engineer,
8 Deputy Chief Engineer – Construction, Chief Engineer – Construction and Major Capital
9 Projects. I also held the chief engineering position for New Jersey Transit as Deputy General
10 Manager for Infrastructure Engineering. I have extensive experience in railroad engineering,
11 construction, operations and maintenance and passenger rail business operations.

12 2. Following adoption of the revised 2012 business plan in April 2012, questions were
13 raised whether a high-speed rail Phase I corridor system proposed in the business plan, containing
14 blended shared tracks on the San Francisco Peninsula, as opposed to a Phase 1 corridor system
15 constructed entirely with dedicated high-speed rail tracks only, could be designed to achieve the
16 two hour and 40 minute San Francisco to Los Angeles nonstop travel time characteristic
17 requirement in Proposition 1A. Prior to the adoption of the business plan, the Authority's system
18 engineers determined that a Phase 1 blended corridor could be designed to achieve the
19 Proposition 1A two hour and 40 minute travel time requirement.

20 3. In response to continuing inquiries, I asked to review simulations that had been
21 completed by our Program Management Team (PMT) to formally assess whether a nonstop travel
22 time of two hours and 40 minutes could be achieved given the currently proposed rail alignments
23 and blended operations. After the review, I refined the criteria utilized for the underlying
24 assumptions and requested an updated assessment.

25 4. On February 8, 2013, I received the assessment. The assessment concluded that a travel
26 time of two hours and 32 minutes between San Francisco and Los Angeles could be achieved
27 under currently proposed alignments and blended operations along the Phase I corridor, and after
28 reading the assessment, I concluded that there may be even more travel time improvement based

1 on train performance improvements, use of tilt technology, more aggressive alignments and
2 higher maximum speeds, all unknown variables at this point in time. A true and correct copy of
3 the assessment is attached to defendants' request for judicial notice as Exhibit 3.

4 5. Berkeley Simulation Software Rail Traffic Controller railroad operations simulation
5 model software was used to produce the travel time in this analysis. The Train Performance
6 Calculator feature in the model is capable of accurately representing the train movements over
7 alignments with different complexity, such as grades, curves, and speed limits, based on the
8 available tractive and braking effort specified for the train set technology taking into account the
9 high-speed rail vehicle rolling resistance coefficients.

10 6. One example of the high-level accuracy of the model's simulation includes the area
11 surrounding Bakersfield. There are curves to the north of the City of Bakersfield and right after
12 Bakersfield where the ascent into the Tehachapi mountains begins; due to the curves the
13 simulation accounts for the requirement that after a train passes the curves it accelerates to 175
14 mph and then the speed drops to 125 mph because of the steep gradient. After the train reaches
15 the top of the grade and begins the descent, it accelerates to 220 mph, maintains that speed for
16 only eight minutes then starts slowing down for another curve around Palmdale.

17 7. Another example of the high-level accuracy of the model's accuracy includes the area
18 between San Francisco and San Jose where the simulation reduces speed to conform to civil curve
19 and main track speed restrictions.

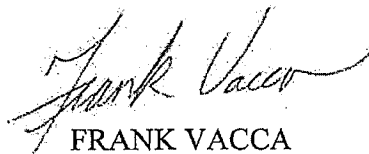
20 8. I am informed by counsel representing the Authority in this action that plaintiffs may
21 believe the Authority is planning to construct a non-compliant train system, based on the
22 operation plan for the blended Phase I corridor in the ridership and revenue forecasting final
23 technical memorandum documenting the ridership and revenue forecasts used to support the
24 business plan. The operation plan is located at pages 2634-2635 of the administrative record.
25 The operating plan does not show that the Authority is designing a system that is not capable of
26 meeting the maximum nonstop travel time requirement of two hours and 40 minutes. The
27 operating plan shows only the number of riders that can be expected on the
28

1 blended Phase I corridor assuming different rail operating criteria, of which one option is a 180
2 minute (or three hour) travel time between San Francisco and Los Angeles.

3 9. An operating plan in the rail industry is a description of the operation of trains as viewed
4 from the perspective of a user of the service. It includes the frequency, running time and stopping
5 pattern of trains in a location. In a broader sense it may include fare policy, loading policy and
6 the presence of amenities on-board. It may also include a service plan describing all movements
7 and activities which are directly required to fulfill the service plan. It includes rolling stock
8 cycles and manipulations, train crew schedules, routing plans for trains and deadhead train
9 schedules.

10 10. For purposes of the Business Plan, the operating plan described that shows a travel time
11 between San Francisco and Los Angeles of 180 minutes (or three hours) depicts travel for both
12 peak and off-peak times along the blended Phase I corridor and was representative of the
13 information provided for the ridership forecasting model to forecast ridership levels based on
14 specific patterns and frequency of train service. These service patterns were designed to achieve
15 maximum commercial yield (i.e., maximum number of riders and revenue) and were in no way
16 tied to the ultimate performance capabilities for travel time along the Phase 1 corridor.

17 I declare under penalty of perjury that the foregoing is true and correct. Executed on April
18 11, 2013 at Sacramento, California.

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20 FRANK VACCA

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