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MAY 01 2012

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Washington, DC 20590

Tom Fellenz
California High Speed Rail Authority
770 L Street, Suite 800
Sacramento, CA 95814

Subject: Final Environmental Impact Statement for the California High-Speed Rail System,
Merced to Fresno Section

Dear Mr. Valenstein and Mr. Fellenz:

Thank you for the opportunity to review the Final Environmental Impact Statement (FEIS) for the Merced to Fresno Section of the High-Speed Rail (HSR) System in California, which was shared with U.S. Environmental Protection Agency (EPA) on April 18, 2012. We completed our review pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), Section 309 of the Clean Air Act, and Section 404 of the Clean Water Act.

EPA has worked closely with Federal Railroad Administration (FRA) and California High-Speed Rail Authority (CHSRA) through the programmatic environmental analysis, as well as through intensive early coordination at the project level. Project level coordination was guided by specific decision checkpoints, which are defined in an agreement signed between EPA, U.S. Army Corps of Engineers, FRA, and CHSRA (*Integrated National Environmental Policy Act and Clean Water Act Section 404 Memorandum of Understanding (NEPA/404 MOU)*). We appreciate the opportunity to engage in early coordination, and we believe that it will continue to lead to efficient resolution of potential issues and strengthened environmental documents as the environmental analysis of the statewide HSR system continues.

For the Merced to Fresno portion of the HSR system, EPA provided recommendations through a formal comment letter (October 13, 2011) following our review of the Draft Environmental Impact Statement (DEIS). We again provided recommendations via a March 28, 2012 comment letter following our review of the Administrative FEIS. We appreciate the responsiveness to multiple recommendations provided by our agency throughout the coordination and commenting process to date. Through this letter, we note remaining concerns that were not addressed in the FEIS and can be addressed in the Record of Decision (ROD) by documenting commitments for the final design and construction phase. The enclosure to this letter provides additional description of EPA's remaining recommendations, which include, but are not limited to, the following:

- Air Quality Impacts
 - Continue to work with the San Joaquin Valley Air District and EPA to finalize the general conformity determination for the San Joaquin Air Basin portion of the project.
 - Provide commitments for identified air quality mitigation measures to reduce construction and operational emissions to the greatest extent.

- Aquatic Resource Impacts
 - Commit to avoidance and minimization measures identified by FRA and CHSRA during the NEPA/404 MOU process and checkpoints.
 - Commit to a set of low impact development measures to retain, infiltrate, and treat stormwater runoff from all features of the HSR project.

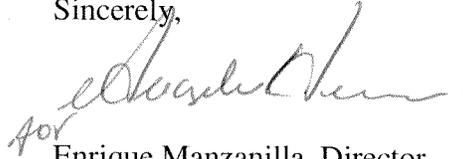
- Planning and Growth Related Impacts
 - Commit to continue partnering with the Cities of Fresno and Merced to promote strong station-area planning in order to maximize economic, community and environmental benefits from the project.
 - Recognize the planning efforts that are needed at urban edges of station-cities and neighboring communities in order to prevent unplanned HSR induced growth, and commit to partnering and providing support to promote good planning.
 - Commit to assess which agricultural lands outside of Fresno and Merced are most at risk of experiencing HSR induced development pressures, and commit to promote placement of conservation easements in those locations.
 - Commit to partner with local and regional transit providers to develop connectivity plans and implement measures to increase transit access to HSR.

More information on the above items and additional recommendations are provided in the detailed comments section enclosed within this letter. EPA recognizes the potential environmental benefits, including reduced vehicle emissions, which an alternative transportation choice like HSR can provide if planned well. In addition to being a cleaner transportation option, we understand that a well-planned HSR system can serve as an important catalyst for improved regional connectivity and strengthened economic centers. We are committed to continued coordination with FRA and CHSRA as the environmental review process for the entire statewide HSR system continues. In addition, we appreciate our ongoing partnership with FRA, CHSRA, U.S. Housing and Urban Development, Federal Transit Administration, and California Strategic Growth Council under the *Memorandum of Understanding for Achieving an Environmentally Sustainable HSR System for California*, signed in September 2011. We encourage FRA and CHSRA to continue to collaborate with EPA on best practices for maximizing environmental, economic, and community benefits from this project, while also identifying opportunities to avoid, minimize, and mitigate adverse impacts.

We appreciate the opportunity to review the Merced to Fresno FEIS and we would appreciate the opportunity to discuss our comments prior to release of the ROD. When ROD is signed, please send a copy to the address above (mail code: CED-2). If you have any questions, please contact me at 415-972-

3843 or Connell Dunning, the lead reviewer for this project, at 415-947-4161 or dunning.connell@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Enrique Manzanilla".

Enrique Manzanilla, Director
Communities and Ecosystems Division

Enclosures: EPA's Detailed Comments

Cc via email:

Mark A. McLoughlin, ICF International
Colonel Michael C. Wehr, U.S. Army Corps of Engineers
Leslie Rogers, Federal Transit Administration
Ophelia B. Basgal, U.S. Department of Housing and Urban Development
Dan Russell, U.S. Fish and Wildlife Service
Robert Tse, U.S. Department of Agriculture
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Heather Fargo, Strategic Growth Council
Matt Rodriguez, California EPA
Kurt Karperos, California Air Resources Board
Seyed Sadredin, San Joaquin Valley Air Pollution Control District
Traci Stevens, Business Transportation and Housing
Garth Fernandez, California Department of Transportation
Diana Dooley, California Health and Human Services
John Laird, California Natural Resources
Julie Vance, California Department of Fish and Game
Brian R. Leahy, California Department of Conservation
Paul Romero, California Department of Water Resources
Bill Orme, State Water Resources Control Board
Mayor William Spriggs, City of Merced
Mayor Ashley Swearengin, City of Fresno

1. AIR QUALITY

EPA understands that California High Speed Rail Authority (CHSRA) is currently coordinating with the San Joaquin Valley Air Pollution Control District (SJVAPCD) and California Air Resources Board (CARB) regarding Clean Air Act general conformity requirements, including a Voluntary Emissions Reduction Agreement (VERA) for the high speed rail (HSR) system.

Recommendations for the Record of Decision (ROD):

- EPA recommends that FRA and HSR continue to work with the SJVAPCD and EPA to finalize the general conformity determination for the San Joaquin Air Basin (SJAB) portion of the project. Describe the process for finalizing the general conformity determination in the ROD and clarify that emissions from any interim use of the new tracks will be accounted for in final emissions inventories.
- Include details of the Voluntary Emissions Reduction Agreement (VERA), including specific incentives and strategies for focusing emissions reductions proximate to actual impact locations in order to focus mitigating measures to those communities most impacted.

EPA is supportive of the many project design features and mitigation measures identified in Section 3.3.8 and 3.3.9 of the Final Environmental Impact Statement (FEIS) to reduce air quality impacts. It is stated in the FEIS that a site specific Health Risk Assessment (HRA) for the Heavy Maintenance Facility (HMF) will be conducted once a final HMF site is chosen. EPA continues to recommend that an analysis of health risk be used to help inform the choice of where to site the HMF.

Recommendations for the ROD:

- Provide commitments for the project design features and mitigation measures identified in the FEIS to ensure that air quality impacts from construction and operation of the HSR system are mitigated to the greatest extent possible.
- Provide details regarding any future health risk analysis that will be conducted prior to selecting a site for the HMF and how this analysis will be made available to the public.

2. AQUATIC RESOURCES and CLEAN WATER ACT

Developing a Final Mitigation Plan for Clean Water Act (CWA) Section 404 should be a key priority for FRA and CHSRA, as it will help avoid potential delays during project permitting. EPA will continue to work with the U.S. Army Corps of Engineers (Corps) to provide guidance to FRA and CHSRA to reduce uncertainty to the maximum extent practicable and provide substantive comments on the development of a Final Mitigation Plan.

During future CWA Section 404 permitting coordination, we recommend continued use of the approved Watershed Approach. Specifically, the Conditional Rapid Assessment Method (CRAM) and Watershed Evaluation Report (WER) (submitted during Checkpoint C of the NEPA/404 MOU process) provided information to fully describe the location, condition and context of the impacted landscape. The analysis showed approximately 1/3 of vernal pools and other non-riverine wetlands, and 1/4 of riverine wetlands along the HSR alignments were in good

condition. We note that these results were not described in the FEIS; however this information will assist in 1) providing context to the current and impacted resource conditions, 2) disclosing the project's mitigation needs, and 3) providing assurances that those needs will be met.

Recommendations for the ROD:

- Commit to and describe measures to avoid and minimize impacts to waters of the U.S., (including additional avoidance measures proposed in Chapter 5 of the NEPA/404 MOU Checkpoint C Summary Report) and provide a summary of proposed compensatory mitigation for unavoidable impacts.
- Disclose the project's mitigation needs and provide assurances that those needs will be met. Provide a summary of key findings and analyses conducted during the California Rapid Assessment Method (CRAM) and Watershed Evaluation Report (WER) in order to provide context to the determination of mitigation needs.

EPA appreciates the additional discussion of best management practices and low impact development (LID) measures provided in the Storm Water Management Report and recommends that specific LID commitments to be implemented throughout the HSR system be identified in the ROD.

Recommendations for the ROD:

- Identify commitments for LID measures to be used during construction and post construction stages of the project to retain infiltrate and treat stormwater runoff from all features of the HSR project.

3. SPECIAL STATUS SPECIES AND WILDLIFE MOVEMENT

EPA appreciates information added to the FEIS on San Joaquin River crossing design options and predicted impacts, such as impacts on Essential Fish Habitats and special-status fish species. Additionally we appreciate the discussion of Wildlife Crossing structures provided in Section 2.4.2.1 of the FEIS. We encourage CHSRA and FRA to continue to work with resource agencies as designs are further developed to ensure appropriate avoidance, wildlife crossings, and mitigation measures are developed to address project impacts.

Recommendations for the ROD:

- Include a commitment for FRA and CHSRA to continue coordination with Fish and Wildlife Service (FWS) and California Department of Fish and Game (CDFG) throughout the project timeline.
- Commit to specific FWS- and CDFG-approved design measures that: 1) remove wildlife movement barriers, 2) enhance use of wildlife corridors, and 3) provide crossings with suitable habitat, topography, light, and openness to accommodate multiple species, as well as other mitigation measures to address impacts that cannot be avoided.

4. REGIONAL AND LOCAL INDUCED GROWTH, LAND USE, AND PLANNING

EPA is supportive of FRA and CHSRA's vision for HSR station areas that stimulate infill development in city centers, are pedestrian friendly, well connected via multiple transportation options, and provide easy access to goods, services, and jobs. The vision and form of HSR-induced development outlined in the FEIS is only likely to occur if major investments in

planning, changes to land uses, and coordination among housing, transportation, business and many other sectors first take place. We recognize FRA and CHSRA's station-area planning grant program as a critical step toward achieving this vision. We also applaud FRA and CHSRA's strong partnerships with the Cities of Fresno and Merced on HSR station-area planning. Based on information provided in the FEIS, however, we strongly suggest that additional commitments are needed from FRA and CHSRA in the ROD in order to prevent significant unplanned, low-density HSR induced growth. In addition, the public should be informed of the range of potential growth scenarios that could occur to increase awareness of potential outcomes and the importance of local planning decisions.

While EPA is very supportive of FRA and CHSRA's efforts on station-area planning, we again strongly suggest that a parallel planning process to protect against unplanned development is needed at urban edges (i.e. county level) and neighboring communities that are likely to experience HSR induced growth. This parallel process could consist of partnering with local and regional governments, state agencies or non-profit organizations while CHSRA is finalizing design and construction for the HSR project. FRA and CHSRA have already committed to partner with the Department of Conservation to establish and purchase agricultural conservation easements. FRA and CHSRA can maximize the benefits from this effort by working to place easements in areas most at risk from HSR induced growth.

New information added to the FEIS on SB375 and Sustainable Communities Strategies provides a more comprehensive understanding of efforts to achieve well-planned, efficient development patterns that best serve communities. EPA urges FRA and CHSRA to commit to continue to partner with station-cities to support local planning efforts, and to form new partnerships to protect against induced growth at urban edges and neighboring communities. In addition, we encourage commitments to coordinate with local and regional transit agencies to promote connectivity with HSR. While the FEIS appears to assume that HSR stations will attract well-coordinated, relatively denser, infill development, this assumption should be supported with strong commitments, documented and memorialized through the environmental planning process, from FRA and CHSRA.

Recommendations for ROD:

- Discuss the potential uncertainty in future induced growth projections and provide a range of potential impacts that the region could experience, with reference to location, pattern, timing, and intensity of growth. Identify any connections to local planning efforts and the role local decision-making will play in determining the location of future HSR-induced growth (already urbanized areas, adjacent agriculture land, or other greenfields, for example).
- Commit to continued coordination with station cities throughout the design and construction phases of the project to assist with development of planning documents, land use regulations, and municipal policies that encourage higher density, mixed-use, transit-oriented development around stations.
- Commit to coordinate throughout the design and construction phases with non-station communities that may experience development pressure due to access to HSR. Support efforts to develop planning documents, land use regulations, and municipal development policies to inhibit low-density development in these areas.

- Develop and commit to criteria (such as proximity to stations and maintenance facilities) and commit to use the criteria for future identification of agricultural and rural lands most vulnerable to HSR induced growth impacts.
- Commit to working with the California State Department of Conservation and/or local land trusts to facilitate identification of potential conservation areas and support of future easements as a means to mitigate potential unplanned growth patterns.
- Commit to promote and support agricultural land conservation easements for high quality agricultural land most at risk for conversion due to the project as a means to mitigate potential induced growth impacts.
- Commit to collaborate with local transit agencies and transportation authorities to develop transit connectivity plans for HSR station areas and neighboring communities where high HSR ridership is expected. Specifically, commit to coordinate with Fresno Area Express, Merced County Association of Governments, and Yosemite Area Regional Transportation System.
- In order to achieve stations that are multi-modal hubs, commit to:
 - Partner with local and regional transportation agencies to facilitate easy transfers between transit and HSR, such as shared ticketing and wayfinding.
 - Design stations to be pedestrian and bicycle-friendly by incorporating features such as bike lockers, changing rooms, and showers.
 - Coordinate with car share organizations and promoting use of shared vehicles at HSR stations to provide an additional alternative to private car use.
 - Work with local jurisdictions on planning for parking and following the Urban Design Guidelines (prepared by CHSRA) and best practices.
 - Minimize the number of parking spaces to the greatest extent possible at stations in order to facilitate the use of transit, construct multi-level parking structures as opposed to large expansive parking lots, and promote programs to phase down the number of parking spaces over time.
 - Avoid surrounding HSR stations with parking lots and creating a barrier effect (as depicted in Figure 2-42b if the FEIS).
- Commit to augmenting CHSRA’s “HSR Station Area Development: General Principles and Guidelines” document and “Urban Design Guidelines” document so that they include equity, and guidelines for promoting equity, as a key principle.
- Commit to working with cities and other stakeholders to help promote the integration of an appropriate percentage of low-income housing into station-area developments. The Response to Comments states that low-income housing will be addressed by other entities.

5. ENVIRONMENTAL JUSTICE AND COMMUNITY IMPACTS

EPA appreciates the revisions to the environmental justice analysis, including the addition of a clearly defined reference community, following EPA’s comments on the DEIS. We recommend further disclosure of information and additional commitments in order to more fully address environmental justice and community impacts. This information may also help address issues related to compliance with Title VI of Civil Rights for CHSRA as recipient of federal funds.

Recommendations for ROD:

- Revisit conclusions regarding whether disproportionate impacts would occur for the categories where the FEIS states that disproportionate impacts would not occur because impacts would be the same among all populations. Since nearly all populations in the project area are communities of concern, it seems that all populations being affected the same might also mean that “impacts would be predominately borne by communities of concern.” This would fulfill FRA and CHSRA’s stated criteria for defining disproportionate impacts. Include any changes to conclusions regarding environmental justice impacts along with mitigation in the ROD.
- Provide estimates of the duration of construction activities that would take place within each potentially impacted community.
- In order to more fully disclose impacts, include a table that displays residential and business displacements “by community” and then totaled for each alternative, following the example of Table 3.12-9 from the Fresno to Bakersfield DEIS.
- Augment MM-SO#2 to commit to focusing business relocation efforts of neighborhood-serving businesses within their existing neighborhoods to minimize impacts to community cohesion to the extent possible and when properly zoned parcels are available or can be made available.
- Commit to conducting community workshops in all significantly affected areas to obtain input and identify mitigation measures for residents whose property would not be taken, but whose community would be substantially altered by construction of HSR facilities, including loss of neighbors. Follow the example of commitments made for the areas northeast of Hanford and Corcoran on page 3.12-83 of the Fresno to Bakersfield DEIS.

6. HEAVY MAINTENANCE FACILITY

EPA understands that analysis and decisions related to the final siting of the Heavy Maintenance Facility (HMF) will be included in the San Jose to Merced environmental review process. Please consider the following when assessing HMF siting.

Recommendations for the ROD:

- Response to Comments states that HMFs will be assessed in a future environmental document. In the ROD, clarify which document will assess HMFs, how public input will be gathered, and how a decision will be made.
- Commit to the consideration of significant impacts to sensitive receptors in the future analysis and selection of the HMF site.
- Include as a criteria in the decision-making for siting the HMF the estimated cancer risk and the Respiratory Hazard Index.

7. COMPENSATION FOR IMPACTS TO AGRICULTURAL IMPACTS

As FRA and CHSRA are finalizing the strategy for compensating for the loss of farmland and farming operations, EPA suggests that the methodology be tailored to address specific agricultural issues.

Recommendations for ROD:

- Include a robust description of the compensation strategy that will be used for farmland, including, 1) how it was developed; 2) how it calculates the present value of lost future earnings; 3) how it assesses the decreased efficiency of operations on remaining land (e.g. due to smaller field sizes, etc.); and 4) assumptions used regarding land staying in the same cropping system and/or changing to systems more amenable to smaller sites, such as truck farming for local consumption.
- In the description of the compensation strategy, include a land valuation methodology that accurately assesses which parcels will be deemed “non-economic”, including 1) assumptions for analysis; 2) source of data used; 3) factors that were considered (beyond connectivity to other farmland, as stated); and 4) the specific role of agricultural specialists in making determinations.

8. ENERGY

EPA supports CHSRA’s commitment to 100% renewable energy and facilities with net-zero energy usage, as well as the addition of text to the FEIS describing CHSRA’s ongoing partnership with National Renewable Energy Laboratory and EPA on developing a renewable energy strategy.

Recommendations for ROD:

- Commit to promote siting of renewable energy infrastructure on contaminated and underutilized lands over pristine lands if FRA and CHSRA have a role in influencing where the source of energy for powering the trains will come from. RE-Powering America's Lands Initiative has a mapping tool that allows users to see contaminated lands by location (http://www.epa.gov/renewableenergyland/mapping_tool.htm.)
- Commit to coordinate with local farming stakeholders to consider linking farming with the need to secure renewable energy to power the project. For example, coordinated site of wind turbines, bio-digesters, and other technologies might benefit both farmers and the CHSRA.

9. CUMULATIVE IMPACTS - CHARACTERIZATION OF SIGNIFICANCE

EPA appreciates changes made to the FEIS in the “NEPA Impacts Summary” sections of Sections 3.12 through 3.18. These sections now clearly indicate whether impacts would be considered significant under NEPA. Although the Response to Comments states that Section 3.19 has also been revised, significance determinations do not appear to be included for cumulative impacts.

Recommendation for ROD:

- Provide a summary identifying whether the anticipated cumulative impacts of the proposed project are significant, as defined by Council on Environmental Quality in 40 CFR Part 1508.27.

10. SUSTAINABILITY PARTNERSHIP, POLICIES, AND PRACTICES

EPA recognizes the many ongoing efforts by FRA and CHSRA to achieve an environmentally sustainable HSR system, including partnering with EPA and others to promote best practices.

We note that several of our comments were addressed in the Response to Comments (response #774-26); however, those responses were not included as commitments in the FEIS. We recommend that all commitments identified in the Response to Comments be included in the ROD. In addition, as applicable, include the following commitments as elements of the Environmental Management System or relevant guidance documents.

Recommendations for ROD:

- Commit to continue to work with the HUD/DOT/EPA Partnership for Sustainable Communities and the State of California Strategic Growth Council under the *Memorandum of Understanding for Achieving an Environmentally Sustainable High-Speed Train System in California* (Sustainability MOU).
- Commit to implement an Environmental Management System (EMS). The Response to Comments (response #774-26) states that an EMS will be implemented, but a commitment does not appear to be in the environmental document.
- Commit to incorporate specific language on preferred qualifications and practices in Request for Qualifications and Request for Proposals to help ensure that contractors have the necessary expertise and develop appropriate proposals to design, construct, and operate the HSR system in a sustainable manner, in line with CHSRA's stated goals. EPA appreciates that the Response to Comments states that this is being addressed (response #774-26). It does not, however, appear to be included in the FEIS.
- Commit to analyze the strengths and feasibility of obtaining LEED certification at the Platinum Level for HSR facilities, including stations and maintenance facilities.
- Commit to exceed CALGreen standards in priority areas by meeting "optional" standards, including: pollutant control, indoor air quality, renewable energy, energy and water conservation, low impact development, and designated parking for fuel efficient/electric vehicles.
- Commit to provide information on green building practices when working with local jurisdictions on station-area development. In addition, encouraging third party certification (such as LEED for Homes and Build it Green) and goals to exceed CALGreen requirements by meeting "optional" standards.
- Commit to provide technical assistance for green building in station areas. Incorporate green building principles into FRA and CHSRA's ongoing grant program to support station-area development and related guidance documents (i.e. Urban Design Guidelines).
- Commit to encourage and assist local jurisdictions in designing for adaptability and reuse in station areas to increase flexibility to meet future community needs. This is especially critical for any parking features which may become unnecessary after transit connectivity is developed. For guidance, see Public Architecture, Design for Reuse Primer, <http://www.publicarchitecture.org/reuse/>, and Lifecycle Building Challenge Resources, <http://www.lifecyclebuilding.org/resources.php>.
- Commit to work with local jurisdictions to obtain LEED for Neighborhood Development (LEED-ND) Certification for station areas. LEED-ND certification provides independent, third-party verification that a building or neighborhood development project is located and designed to meet high levels of environmentally responsible, sustainable development.

11. CONSISTENCY ACROSS HSR PROJECT SECTIONS

Through our concurrent review of separate environmental documents for Merced to Fresno and Fresno to Bakersfield HSR sections, EPA identified impact categories where methodologies for analysis appear to vary. While regional differences will require adjustments to impact methodologies, EPA continues to recommend consistency in the analysis when applied to various HSR Project Sections. Sections where inconsistencies were noted include hazardous materials, HMF operational noise, cumulative noise impacts, and environmental justice.

Recommendations for the ROD:

- Confirm that methodologies and resulting conclusions and decision-making processes are being applied consistently across the multiple HSR sections. EPA is available to assist with reviewing template methodologies upfront to increase efficiency of the overall environmental review process.