CCHSRA
CITIZENS FOR CALIFORNIA HIGH SPEED RAIL ACCOUNTABILITY

July 7, 2015

California Air Resources Control Board
1001 "I" Street
Sacramento, CA 95814

Re: Public Comments: Funding Guidelines for Agencies that Administer California Climate Investments

Dear Members of the California Air Resources Board:

Citizens for California High-Speed Rail Accountability (CCHSRA) is responding to a California Air Resources Board (ARB) notice calling for public comment on funding guidelines for agencies that administer "California Climate Investments" funded by state proceeds from Cap-and-Trade auctions. The ARB Ombudsman's Office informed our representative on June 29 that comments may be submitted up to July 13 to be included in the comment log.

The last two California state budgets have directly provided to the California High-Speed Rail Authority a total of $650 million in "auction revenue" collected from Cap-and-Trade auctions, even though all of the activities related to building and operating the High-Speed Train System may result in more GHG emissions than the alternative of never building the project at all, in both the short-term and in the long-term.

The California Air Resources Board (ARB) needs to develop guidelines for Cap-and-Trade revenue that allow the state to award grants or subsidized loans to projects and programs that have a reasonable likelihood of promoting a net reduction of greenhouse gases (GHGs) within a reasonable period of time. The California High-Speed Train System is NOT one of those projects or programs.

The mission of Citizens for California High-Speed Rail Accountability (CCHSRA) is to ensure that the proposed California High-Speed Rail Project does not adversely affect the economy, environment, or the quality of life for California's existing communities. Our comments and recommendations are based on our study and analysis of this one specific project, on which the State of California has spent and will spend significant Cap-and-Trade revenue.

A Weakness in the System: Awards of Grants Funded by Cap-and-Trade Revenue to the California High-Speed Rail Authority Are Based on Unsubstantiated Long-Term Predictions and Promises for the Future

ARB is faced with the challenge of making decisions on the expenditure of Cap-and-Trade revenues based on predictions of the future. Unless it establishes a procedure for a recipient of the funds to pay back the money if GHG emission reductions are not achieved, ARB has to ensure a reasonable degree of certainty that a recipient of funds will actually spend it on a project or program that mitigates global climate change.

An example of a program or project with significant uncertainty about reducing net GHG emissions would be the California High-Speed Rail project, which has the following conditions:

- substantial GHG emissions from site construction and materials manufacturing and delivery
- an alignment that will require cutting down an unknown number of orchard trees
- rather than the project itself reducing emissions, the project owner seeks to be a funding intermediary for other parties to reduce emissions in unrelated areas, such as planting trees, buying buses for school districts, and buying tractors and irrigation pumps for farmers
- propulsion based on electricity produced from uncertain sources
- a timeline for limited electrified high-speed passenger travel starting no earlier than 2022
- no plan to use the completed but not electrified track for passenger travel
- recent funding that has come primarily from Cap-and-Trade revenue itself
- no source of public funding identified for the $16 billion estimated cost to build the project segment from Bakersfield to Palmdale, a part of the Initial Operating Segment
- no private investment or imminent prospects for private investment
- speculative ridership projections and an uncertain idea of how many households will travel on high-speed trains as a substitute for driving in passenger vehicles
- engineering challenges, in particular the lack of an alignment through the Tehachapi Mountains from Bakersfield to Palmdale, a part of the Initial Operating Segment
- challenged by extensive litigation
- a relatively high degree of disapproval among ordinary Californians
- the reality that high-speed rail going through a disadvantaged community will have negative ramifications that may outweigh positive impacts (See arguments from City of San Fernando.)
- experts who recognize a possibility that the project - when considered in its totality - may never reduce net GHG emissions as compared to an alternative not to build the project at all

In the fall of 2010, two experts in Civil and Environmental Engineering at the University of California, Berkeley published a report entitled "Life-Cycle Environmental Assessment of California High Speed Rail." This report suggested that claims of major reductions in greenhouse gas emissions because of California High-Speed Rail might be unfounded.

Taking life-cycle and ridership uncertainty into account can yield drastically different estimates about the energy efficiency of different transportation modes…The life-cycle inventory for high-speed rail shows that accounting for infrastructure construction and electricity production adds 40 percent to the energy consumed by the trains' operations alone…Greenhouse gas emissions increase by about 15 percent, primarily because of the concrete used in construction – half a

kilogram of CO2 is emitted for every kilogram of cement produced. Infrastructure construction will emit roughly 490 million metric tons of greenhouse gases, which are approximately 2 percent of California's current annual emissions. As was the case with the life-cycle inventory of conventional modes, the majority of emissions are released not from the electricity needed to propel the high-speed trains, but from the indirect and supply-chain components.

We can estimate the energy payback period for high-speed rail by comparing the energy used in its construction with the resulting energy savings in its operation, but only by making assumptions about ridership. The payback period evaluates the upfront energy or emission investment in deploying high-speed rail infrastructure against the potential reductions over time. The California High-Speed Rail Authority provides a ridership estimate, but as we noted above, ridership is uncertain, and for an entirely new mode it is very uncertain. Thus California high-speed rail warrants ridership evaluation for both high- and low-ridership scenarios. We consider high ridership as strong adoption of high-speed rail at the expense of auto and air travel, mid-level ridership as moderate adoption of high-speed rail, and low ridership as poor adoption of high-speed rail where travelers favor auto and air. For high ridership scenarios, the energy payback period on the initial investment is eight years, for mid-level ridership 30 years, and never for low ridership (when under-used high-speed rail is coupled with increased utilization of auto and air travel). For greenhouse gas emissions the payback period for rail is six years for high ridership, 70 years for mid-level ridership, and never for low ridership…Thus the California high-speed rail system can reduce greenhouse gas emissions, but may do so only over a very long period, and will do so in exchange for other air emissions.

In 2013, the California High-Speed Rail Authority produced a report mandated by state law entitled "Contribution of the High-Speed Rail Program to Reducing California's Greenhouse Gas Emission Levels." This report focused on "commitments" and promises and lacked adequate data to justify the expenditure of $650 million. This is not surprising, because the High-Speed Train System is too early in development to cite specific programs or results. If the project stops after the completion of Construction Package No. 5 with a dedicated rail line without electrification between Madera and Shafter, would the $650 million expenditure be justified in terms of reduced GHG emissions?

CCHSRA Recommendations for ARB Funding Guidelines

1. Prioritize funding applications that predict the highest ratios of net reductions in GHG emissions to amount of Cap-and-Trade revenue spent.

2. End "earmarked" budget appropriations for Cap-and-Trade revenues that evade the ARB evaluation system for funding requests. This behavior, if it continues, destroys the credibility of claims that the Cap-and-Trade program is meant for climate protection. In fact, surveys or polls would probably confirm anecdotal evidence that the Cap-and-Trade program is developing a public reputation as a "slush fund" to pay for legislative whims. If all projects and programs endure a rigorous evaluation process through ARB, the accusations of political favoritism will fade.

3. Funding requests shall answer the following questions and independent parties shall evaluate the answers for accuracy and completeness:

1. Is there a way for the recipient to return the funding or a weighted percentage of the funding if promised GHG emissions reductions do not occur?
2. What percentage of the funding will go to actual physical construction of the project, as opposed to public relations or the payment of interest on bond sales or other debt financing?
3. Is there a reasonable likelihood that the project will be completed?
4. Is there a reasonable likelihood that the project will be completed in the manner, time period, and estimated costs cited in the application?
5. Is there a reliable source of funding from other sources besides Cap-and-Trade revenue for the project? If not, why has the project failed to receive financial support?
6. Is there a reliable way to annually measure how the project reduced GHG emissions, so that an annual ratio can be identified comparing net reductions in GHG emissions to amount of Cap-and-Trade revenue spent?
7. Are the net GHG emissions reductions related directly to the project as implemented, or would the claimed reductions be a result of the recipient serving as an unnecessary intermediary to disperse funds for the unrelated activities of other agencies or private organizations?
8. If a recipient serves as a funding intermediary, how will it bring accountability and transparency to the sub-recipients?
9. Is there a reliable way to measure long-term net change in GHG emissions for the project in its totality, incorporating activities such as manufacturing and construction?
10. In addition to "direct, meaningful, and assured benefits" for a disadvantaged community or communities, will the project impose "direct, meaningful, and assured liabilities" on a community? (For example, how will California High-Speed Rail negatively impact residential neighborhoods in small towns in the San Joaquin Valley and in the City of San Fernando?)
11. During environmental review of the project under CEQA or NEPA, what were the objections and concerns expressed by commenters? Were the lead agency's responses to those comments adequate? Is there any litigation challenging approval of the project based on failure to comply with CEQA or NEPA?

Citizens for California High-Speed Rail Accountability (CCHSRA) has long been critical of how the California High-Speed Rail Authority lacks public accountability and transparency. The California Air Resources Board has an opportunity to serve the People of California by establishing guidelines that force this agency to show how state proceeds from Cap-and-Trade auctions will actually reduce greenhouse gas emissions.

Sincerely,

Aaron Fukuda
Chairman, Citizens for California High-Speed Rail Accountability