

Transportation Solutions Defense and Education Fund

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April 29, 2014
By E-Mail to
electrification
@caltrain.com

Peninsula Corridor Joint Powers Board
Attn: Stacy Cocke, Senior Planner
1250 San Carlos Ave.
P .O. Box 3006
San Carlos, CA 94070-1306

Re: Peninsula Corridor Electrification Project DEIR

Dear Stacy:

The Transportation Solutions Defense and Education Fund, TRANSDEF, is a Bay Area environmental non-profit advocating the regional planning of transportation, land use and air quality. We are transit advocates, and strongly support Caltrain and HSR. However, we have serious doubts about the soundness of Caltrain's current planning and are convinced that the current plans for HSR are economically infeasible and will not lead to a working system. We therefore have every expectation that the CHSRA project will fail. As a result, we bring a different and highly critical perspective to the Peninsula Corridor Electrification Project (Project). We offer the following comments on the complex issues raised by the Draft Environmental Impact Report (DEIR):

Conditions have changed since the JPB first tied its fortunes to those of CHSRA. The latter's legal challenges and falling public support mean that JPB can no longer count on the CHSRA as its major funding partner. There is a substantial chance that the Project that JPB wants cannot be built. It would be wise, therefore, for the JPB to develop an independent course as a fallback, in case its dreams of partnership do not materialize.

To plan for that eventuality, it would be necessary to evaluate a project alternative that has no expectation of HSR funding. This DEIR doesn't do that--its alternatives merely go through the CEQA motions. For starters, there would need to be a fallback scenario, with a separate alternatives analysis based on existing non-HSR funding and a Project Purpose and Need that does not include "Provide electrical infrastructure compatible with high-speed rail" which is the very first primary purpose for the Project. (p. 1-10.)

The Project faces uncertainties with complex interdependencies

The viability of the HSR project

- Court rulings block construction funds, prevent the issuance of bonds, and set an impending trial that will determine whether the HSR project is consistent with Proposition 1A.
- The project is not eligible for cap and trade funds because it would significantly increase GHG emissions due to all the concrete proposed for construction. This is the only alternative source of construction funding.

The feasibility of Blended Service is unknowable at this time

Questions raised in our Scoping Comments were not answered:

- Is it feasible to run HSR on tracks used by heavy freight trains? Would this require unreasonably frequent and costly maintenance efforts?
- Can an agreement with the Union Pacific RR be reached, to avoid its veto of HSR intercity service?
- What is the impact of Blended Service on Caltrain's ability to expand service in the future? We are aware of a past Caltrain long-range planning forecast that called for 10 trains per peak hour to meet future demand. What are the cumulative transportation impacts of Caltrain having a maximum capacity of only 6 trains per hour per direction? Will this result in unmet passenger demand?
- What would be the operational impact of the inability of JPB and CHSRA to agree on a common platform height?
- Would the Proposition 1A requirement for bypass tracks around stations require the construction of more tracks than were disclosed in the DEIR? What would be the impact of HSR trains passing by at full corridor speed on the safety of passengers on the platforms?
- What is the impact on Caltrain capacity of the CHSRA's assumption that "Caltrain ... will allow for a high-speed express train to run unimpeded between SF and SJ"? A full operations simulation is needed to determine the actual capacity for Caltrain when sharing tracks with HSR. Could Caltrain's capacity be reduced below the 6 trains per peak hour found feasible by LTK in their preliminary study of the blended approach?
- The attached *Evaluation of Caltrain/HSR Initial Simulation* suggests that blended service will result in the effective abandonment of Baby Bullet service. Because this service has been vital to the financial performance of Caltrain, what are the impacts of eliminating Baby Bullet service? Will Caltrain be able to survive financially, or will it be unable to operate, thereby transferring its passengers to the auto mode and creating significant transportation impacts?

This latter set of questions can only be resolved through a certified future Blended Service EIR. Certification of this EIR with these questions unanswered would therefore be an incomplete basis for a decision to proceed with the Project. The dependencies between the Project and the HSR project are so strong as to make this EIR inadequate without a complementary Blended Service EIR. This is a classic case of project chopping.

Besides its CEQA deficiencies, committing JPB resources to staffing up the Project is irresponsible on the part of management, given the current level of uncertainties. Decisions made on the basis of this environmental review involve a massive public investment that could later become a dead end. The interactive relationship between all the issues remaining to be resolved (pp. ES-25-26) means that the decision to proceed with the Project cannot be made with an adequate degree of confidence.

Overall Comments on the DEIR

This DEIR was not an honest attempt to compare Project and No Project alternatives. Comments below detail numerous ways in which the analysis was not well thought out or obfuscatory. In particular, the use of large absolute numbers as evidence of an impact is deceptive, when those numbers are actually a very small percentage of an even larger number. Examples:

- 3.14-39: "Total daily VMT under the 2020 Project scenario is projected to decrease by approximately 235,000 miles compared with the 2020 No Project scenario." No mention is made of the embarrassing fact that this is only a 0.1% decrease, far below the sensitivity of the travel model. Claiming this "would substantially improve congestion on a broad general basis" (p. 3.14-61 and similar reference at p. 4-104) is flat-out dishonest. The number that would have been substantial would have been a meaningful percentage change in mode choice.
- 3.7-11: The reduction in GHGs from implementing the project is stated in absolute numbers, 67,709 MMTCO_{2e}, without ever setting that number in a regional context. The question "Is this a meaningful contribution to regional emissions reductions" is never asked. We suspect not.

This assertion of benefits is notable for the complete absence of context that would allow the evaluation of the marginal cost of achieving these benefits. Yes, benefits have been identified, but how valuable are they, and at what cost? A public agency must constantly ask that question before committing public funds.

Part of the problem lies with JPB's partner, the CHSRA. The Vacca memorandum asserted the ability of HSR to travel from San Francisco to San Jose in 30 minutes at 110 mph (p. 2-20). Through the Public Records Act, we received a copy of an earlier version of that memo in which 125 mph travel resulted in the only 30-minute trip. (See Declaration of Kathy Hamilton, Attachment A.) When CHSRA decided to not pursue the 125 mph travel speed, the travel time was retained, but the speed was dropped to 110 mph, apparently fraudulently.

Impact Analyses

Air Quality

Given the mandated trend in fuel efficiency standards in the automotive industry, it is unreasonable that the same number used for Existing (2013) diesel consumption is appropriate for the No Project (2020) and No Project (2040) alternatives. (Appendix B-35; Caltrain Operations, source.) The No Project Description (p. 5-2) is silent on whether the existing equipment will continue to be used after 2019.

However, it would be fundamentally misleading to produce a comparison between new EMUs and the worn-out existing rolling stock in 2020. It is clear that the fleet will need to be replaced, whether by EMUs or by new diesel equipment, based on the statement: "New EMUs would replace the portion of Caltrain's existing diesel locomotives and passenger cars that will reach the end of its useful life by 2019." (p. 2-11.)

Therefore, we must assume that the same percentage of the fleet will be replaced with new equipment before 2020 in the No Project Alternative as well. That means that the 2020 and 2040 No Project fuel consumption and corresponding CO₂e should drop due to improved technology. Either use real-world Tier 4 numbers from a source other than Caltrain, or provide expert opinion and evidence to justify the assertion that fuel efficiency will not improve over the next 30 years.

The fuel consumption for the DMU alternative is listed on p. B-47 as 3.9 gal/mile. However, the reference "Jacobs (2008)" does not appear in the citations for Chapters 3.2, 3.7, or 5, preventing the verification of this key data point. The reference for the same number on p. B-46 is "(EOT 2008)" which similarly is not in the citations. This number is suspect, because it leads to DMU fuel consumption that is 17.4% higher than current locomotives (17,550 gal/day vs. 14,944 gal/day), for vehicles that are lighter and that should perform substantially better.

For example, the new FRA-compliant SMART vehicle was simulated by the manufacturer to use 61.4 gallons per car for a 140-mile roundtrip, or 0.44 gal/mile. (See attached communication.) That calculates out to 3.5 gal/mile for an 8-car consist, a 10% decrease from the number used. A modern alternate-compliant DMU will be lighter and more fuel-efficient.

Please provide enough information to make it possible to verify from the Appendix tables that this comparison is based on the same number of miles per day and trains per day. In particular, it is unclear whether Gilroy service is included in the B-35 table.

Table 3.2-7 (and text on 5-4) shows only modest reductions in criteria pollutant emissions for the 2020 No Project Alternative. However, since the fleet needs to be replaced now, and Tier 4 engines are available (at least for DMUs), emissions

should be the same as those for 2040. The problem is evident on B-37: The proper criteria pollutant emissions factors should have come from Table 4, not Table 7. The former is the standard that new equipment must meet, while the latter is intended to capture the emissions of large fleets that contain significant amounts of older equipment. The latter is inappropriate for evaluating the emissions of a new fleet.

Table 3.7-3 (p. 3.7-10) does not offer a fair comparison between alternatives with respect to VMT emissions. It should indicate the increased ridership and change in VMT emissions for the No Project Alternatives, from both 1) 2020 and 2040 diesels having better performance than current rolling stock and 2) the increased No Project ridership identified in Table 2-3 (p. 2-12). ("Net" is undefined on B-36.)

Please publish the source material from The Climate Registry that provided the emissions factor for CO₂. (Appendix B-47.) The referenced URL is apparently not accessible by the public.

Due to the flawed analyses in Chapters 3.2, 3.7 and 5, no alternatives analysis conclusions are possible. Please redo the calculations for, based on the comments above, taking care to clearly document the miles/day and trains/day used in each and the percentage of diesel equipment replaced by 2020.

3.2-23: FN 3 is misleading, in that the absolute numbers of the health risk is critical in this instance in evaluating the significance of the risk reduction. A large reduction in a small number (the result of stricter federal regulations) is only a small risk reduction. Any reference to a Menlo Park study is meaningless without an indication that the No Project emissions were based on 2020 Tier 4 engines.

Tree Removal

2-5: The description of the placement of the OCS poles makes this sentence ambiguous: "These poles are placed approximately 10 to 12 feet of the centerline..." It is either missing one or more words, or should have said "from the centerline" Use the phrasing at 3.3-43:1.

2-5: Why the range in contact wire heights? Why not give the UP and the other freight operators what they want in height, at least on the unconstrained vast majority of the corridor?

3.1-2: The analysis of aesthetic impacts is undertaken under CEQA, irrespective of whether Caltrain actions within the ROW are subject to the jurisdiction of local agencies. If an impact is found to be significant, it must either be mitigated or identified in the Statement of Overriding Considerations.

3.1-8: Should offer a map indicating areas where aesthetic impacts are significant, to provide a sense of scale of the problem.

3.1-18: It is peculiar to assert that rail passengers waiting for a train are not sensitive visual receptors.

The photos of Figure 3.1-2 would be far more useful to DEIR readers if the respective simulations were printed on the same page.

Figures 3.1-5, 7, & 9: There is no visual indication of the degree of tree trimming being considered.

Figures 3.1-4, 12, 13, 15, & 16: Is there a less visually intrusive design for a switching station? These simulations show this design to be visually incompatible with non-industrial sites. Could these impacts be mitigated by pad-mounting the transformers and using underground duct banks to connect to the OCS poles?

3.1-25: Doesn't line 4 contradict the assertion on 3.1-18 that rail passengers waiting for a train are not sensitive visual receptors?

3.1-25: Please clarify as to whether the "dense landscaping and vegetation" would remain to provide actual screening, due to the dimensions of the Electrical Safety Zone, ESZ.

3.1-27: Shouldn't replacement trees be scaled to what they are replacing?

3.1-27: MM AES-2b and 3.3-45: MM BIO-5 must be more specific. There needs to be an alternatives analysis to determine which of the different OCS support types (Figures 2-3 through 2-7) is most appropriate for each specific site to be mitigated, for at least Burlingame, Atherton, Menlo Park, Palo Alto and Sunnyvale, the cities where the tree inventory was performed. (Appendix H-7.) This analysis must be subject to public comment. Nothing in the text indicates that anything other than the side-pole cantilever style of support has been considered. The impacts of some tree removals could be avoided by site-specific selection of two-track cantilevers or center poles. As a policy goal, JPB should support carbon sequestration through the avoidance of tree removal.

3.3-43: The statement "use of center poles where adequate separation exists between rail lines..." implies that tracks would not be relocated, if needed to provide adequate separation for a center pole, where that type support would reduce tree removals. Please clarify if MM BIO-5 includes the consideration of relocating the tracks to enable the use of center poles. If yes, the noise and vibration secondary impacts of having freight trains closer to residences would need to be evaluated.

Electromagnetic Fields

By concerning itself with existing standards and the conventional understanding of the biological impacts of EMFs, Chapter 3.5 is looking in the wrong direction.

3.5-3 FN 2 is incorrect when it claims that the 10 kHz to Ghz frequency bands "are well above the frequency bands applicable to Caltrain." As indicated in the attached study, *Historical evidence that electrification caused the 20th century epidemic of "diseases of civilization"* there is valuable evidence in the historic record that the introduction of electrification to rural states was accompanied by increases in cancers, coronary heart disease and diabetes. The author found correlations between cancers and high-frequency voltage transients, which can be caused by "arcing, sparking or bad electrical connections." (p. 337.) These conditions are endemic to catenary systems, making the exploration of high-frequency transients directly applicable to the Project.

Due to the active opposition of the telecommunications industry, concerns about the health effects of EMFs have not been extensively researched in the U.S. However, a large body of work done in other countries has been compiled at www.bioinitiative.org/ While this work is primarily concerned with transmissions of radio frequencies rather than transients, it does provide a useful counter-balance to the Electric Power Research Institute's soothing pronouncements.

3.5-11: The reference to "aerial ground conductors" on 3.5-12 needs to be explained. The absence of a good diagram makes it impossible to evaluate the assertion that the currents in the two parallel aerial feeders would flow in opposite directions to the main catenary conductors. For any main catenary conductor, isn't the return path through the track and the ground? The two main conductors are likely to be different phases of a 3-phase service, so they would not cancel, because they would be 120° out-of-phase. The assertion that the EMF would be cancelled is thus unsupported.

4-63: CUMUL-5-EMF did not address any of these concerns.

Horn Noise

Given that a primary Project purpose is "reducing noise emanating from trains" (p. 1-10) it is downright peculiar that the DEIR does not propose to implement quiet zones. They are clearly a feasible mitigation for noise emanating from trains.

4-83: "With cumulative train service increases, under the worst-case assumptions noted above, there could be significant cumulative noise impacts in all 2020 and 2040 scenarios evaluated, compared with existing conditions." Our review of past environmental documents has informed us of the outsized contribution of horn noise to train noise impacts, which is why we asked in our Scoping Comments for a quiet zone mitigation to be studied. The decision to not perform that analysis in the DEIR prevents policymakers from being able to evaluate the potential beneficial effects of adopting that mitigation as compared to the other

mitigations proposed. Please adopt it as a feasible mitigation and perform the analysis of the implementation of quiet zones on cumulative conditions.

We disagree with the drafting of MM NOI-CUMUL-1, as it fails to establish a nexus for the responsibility to mitigate impacts. The language "as funding becomes available" is legally unacceptable for a CEQA mitigation. We disagree with the analytic method as well: The cost allocation should not be based on the contribution of the Project over No Project conditions. The increase in cumulative noise over existing conditions on the corridor, as indicated in Table 4-12, is the impact that must be mitigated. Order-of-magnitude cost estimates should be prepared for the implementation of the safety measures required to complete a quiet zone application.

C10-1: It seems unreasonable that "8-car DMU trains are expected to generate similar noise levels to the existing diesel locomotive trains." No evidence is provided to support this assumption.

Transportation

Comparisons between Project/No Project VMT are inherently unfair because of the unreasonable assumption that diesel technology will remain stuck at the 2013 level of acceleration performance. Note the statement "EMU trains are more efficient than the current diesel-powered locomotives because they can accelerate and decelerate faster than diesel-hauled vehicles." (p. 3.14-32, emphasis added.) No additional trains per hour beyond 2013 levels (p. 5-2) are assumed for the No Project Alternative, despite the "more frequent and dependable passenger service" provided by CBOSS PTC. (p. 3.14-32.) This is "fundamentally misleading."

3.14-33: We are concerned that Caltrain ridership projections may be much too low. The implementation of *Plan Bay Area*, with its emphasis on transit-oriented development and Safe Routes to Transit, can be expected to affect mode of access and mode choice. Current mode shares should not be straight-line projected in the future. Auto ownership is a key parameter here, strongly affected by the availability of convenient transit, including Caltrain. Recent reports on the 2004 national peak in VMT and on the Millennial Generation suggest a change in travel preferences is in progress. Given the high levels of assumed population and job growth, it would be reasonable to expect growing disaffection with the expected highway congestion. As a result, we harbor doubts as to the predictive value of projections based on current traffic validations. Caltrain needs to be ready for an entirely new game in which it is the star.

Table 3.14-14 (p. 3.14-40) shows less than a 0.2% impact of the Project on regional VMT as compared to No Project, despite all the unfair assumptions about the latter, identified above. In short, the regional benefits of Caltrain electrification are insignificant. The asserted 1.8% reduction in all cities along the corridor is at the threshold of sensitivity of the model. In short, there are no meaningful transportation benefits identified in Impact TRA-1c.

If anything, the analysis in this section indicates an all-too-modest set of expectations about ridership growth. TRANSDEF is a transit advocacy organization. From our perspective, this project, which has been the white whale of thirty years of Caltrain planning, is unimpressive. We wonder, for example, why no mention is made of increasing operating speeds above 79 mph. With ever-increasing highway congestion and a projected 30% increase in population, we believe the conditions are favorable for a dramatic growth in ridership. We would like to see Caltrain campaign for a significant mode share of the commute.

The obvious mitigation for the 2020 parking deficit identified in Impact TRA-6b is to raise parking fees. That will encourage access mode shift, or the private creation of market-rate parking.

ES-9 FN4, ES-25, 2-11, 3.14-65, 4-33, 4-126 FN22, 4-127, 4-131, and 5-9: In October, 2011, the FRA released its *Technical Criteria and Procedures for Evaluating the Crashworthiness and Occupant Protection Performance of Alternatively Designed Passenger Rail Equipment for Use in Tier 1 Service*. The report Preface states:

The criteria and procedures contained within this report provide a technical framework for presenting evidence to the Federal Railroad Administration (FRA) in support of a request for waiver of the Tier I crashworthiness and occupant protection standards, including the compressive (buff) strength requirements set forth in 49 CFR § 238.203. ... In addition, these guidelines form a technical basis for making determinations concerning alternative compliance with the Tier I crashworthiness and occupant protection standards, as set forth in §238.201(b). The criteria and procedures contained in this report may be incorporated into the Passenger Equipment Safety Standards at a later date, after notice and opportunity for public comment.

Thus, while the rulemaking for alternate-compliant vehicles may not be complete, a pathway to receive routine treatment of waiver petitions has been opened.

Cumulative Impacts Analysis

2-20: Will the OCS be designed to support a speed of 125 mph?

4-45: The following assertion refuses to evaluate the key question for this Project: "Thus, there would be no cumulative operational impacts of the Proposed Project and Blended Service until those dates [between 2026 and 2029]." JPB needs to know how Blended Service limits future Caltrain expansion.

4:95: The failure to provide a table of cumulative vibration impacts impedes the reader's ability to evaluate their significance. The impact conclusion is instead buried in the text: "Given the more than doubling of trains along the Santa Clara to San Francisco segment of the Caltrain corridor, a potentially cumulative significant increase in the number of vibration annoyance events for residential and institutional building receptors is identified."

4:95: It is arbitrary to assert that "A significant cumulative impact would only occur when the number of vibration events approaches a doubling of existing conditions." [emphasis added.] No regulatory or evidentiary support for this assertion is offered.

4-98: To say that "Mitigation Measure NOI-CUMUL-2 would help to reduce the Proposed Project's contribution to a less-than-significant level" [emphasis added] means that the cumulative impact has not been mitigated to a less-than-significant level. Unless there is an enforceable commitment to a performance standard, unqualified by financial constraints, this cumulative impact must be considered Significant and Unavoidable.

4-116: Exactly parallel to the comment about the mitigation measure immediately above, MM TRA-CUMUL-1 cannot be considered to mitigate the cumulative impacts to a less-than-significant level, because there is no enforceable commitment to a performance standard, unqualified by financial constraints.

4-120: Here is a possible third option for MM TRA-CUMUL-2: Have short de-energized sections of OCS and trolley wire, meeting in a fixture analogous to a track diamond, where the pantograph and trolley pole can maintain contact with their respective wires, while smoothly passing one another. Trolleys use fixtures somewhat like this for their perpendicular crossings. This option would eliminate the need for special control equipment.

4-132: MM TRA-CUMUL-3 is silent as to whether it honors the freight railroads' request for 23 feet of vertical clearance in the corridor, with the exception of the constrained clearances mentioned.

Appendix D-105: The "2040 Project schedule is a mix of Baby Bullet, Limited (skip-stop), and local trains at differing frequencies than assumed in 2020." The scenario does not, however, include high-speed rail, even though "provid[ing] electrical infrastructure compatible with high-speed rail" (p. 1-10) is the very first articulated primary project purpose. It is thus incomplete. Note that Tables A.2.1 and A.2.3 in Appendix I show no separately marked 2040 Baby Bullet service

The cumulative impacts analysis of Blended Service is legally inadequate, as it doesn't have a prototype schedule, indicating how the blending would work. Without a schedule subjected to public comment, no valid impact conclusions can be drawn.

Unavoidable Impacts Analysis

4-134: It is unclear from the text that electrical distribution losses between the point of electrical generation and the motors where the power is actually consumed on the rail vehicle have been included in the calculation of total energy use. Because losses are appreciable, they must be evaluated.

Alternatives Analysis

5-2: The acceleration data used in Table 5-1 is 7 years old for Dual-Mode DMU (DEMU, for diesel/electric MU) vehicles and 6 years old for DMUs. This is unacceptable, as tremendous progress is being made in the rail industry, as implied in FN 7, p. 5-24. The Alstom Regiolis DEMU is now being tested and put into service in France. DMU models are available now that weren't available 6 years ago. To have a legitimate alternatives analysis, this table must be updated with current performance data for comparisons to be legitimate.

5-2 & 5-8: The reference to (EOT 2008) is not found in any of the citation lists. It is impossible to verify.

5-8 FN1: With the disclosure of the substantially higher fuel consumption assumed for the single-level DMU alternative, the analysis of a bi-level DMU was needed to prevent this alternative from being seen as a mere straw man to be knocked down. Further explanation is needed why bi-level EMU cars fit in tunnels, while bi-level DMUs would not, especially given the program to increase vertical clearance in tunnels to preserve access for existing freight cars.

5-9: The first and second sentences are each true only for some DMUs. They either have hydraulic drive or electric drive.

5-9: The reference to boarding time (dwell time) suggests the need for an apples-to-apples comparison between vehicle types. They should have the same number of doors.

5-10: Without modelling ridership, the DEIR is unable to identify the marginal benefits of the Project over the alternatives. As stated earlier, marginal benefits come with a cost. The EIR is incomplete without an understanding of the benefits of the Project as compared to those of a less-costly alternative.

Tables 5-3 & 5-4: Yes, the Project would bring benefits, but would they be quantitatively significant? There is no context given to evaluate the question of whether these benefits are worth the cost--or would even be noticed regionally.

Table 5-5: The text is incorrect. The DMU alternative has higher noise levels at only 3 locations, not 45, and those three are each equal to or lower than existing noise levels.

5-23: The discussion of DEMU unreliability is not relevant, as the anecdotes selected do not represent products of the European manufacturers likely to

supply DEMU rail vehicles. More useful would be a literature search for reliability on existing European lines served by DEMUs.

5-24: Comparing a 10-car DEMU to a 6-car EMU appears unfair. Please verify passenger capacity for new DEMU models, and revisit the needed consist length.

5-24: Because DEMUs have the same traction motors as EMUs, it is far from clear that they would have slower deceleration rates, especially if the energy of braking is captured by an energy storage system.

5-24: TRANSDEF suggests this DEMU sub-alternative: Construct catenary in a targeted fashion, prioritizing the acceleration zone surrounding closely-spaced stations (and consider the aesthetic impacts in each target zone). This would provide an acceleration boost to DEMUs at a much lower cost, and with lower environmental impacts. After the electrified zone, the diesel prime mover would maintain the running speed. Because acceleration zones are a much smaller percentage of the total distance between widely spaced stations, electrification would be of significantly less benefit there. An added benefit of a DEMU alternative would be the elimination of a separate fleet to serve Gilroy, once alternative compliance is demonstrated to the FRA. The central question posed by this sub-alternative is "What is the marginal benefit from EMUs, compared to this DEMU sub-alternative, once all system costs are counted?" Until JPB can answer that question, it does not have an adequate basis for a responsible decision.

5-41 & 5-42: The DEIR's primary conclusion is meaningless: "However, compared with the Proposed Project, the Dual-Mode DMU Alternative and the DMU Alternative would result in higher criteria pollutant and GHG emissions, higher noise levels, and worse regional traffic, but would avoid the long-term impacts of the OCS infrastructure and tree removal." As we have continually said, "and how much is that worth?" As discussed above, the noise levels are actually not higher and the impacts on regional traffic are insignificant. When the criteria pollutant and GHG emissions are evaluated on a regional basis, they are likely to be insignificant as well.

5-42: The DEIR's claim that benefits to public health and safety outweigh the other values is meaningless in the absence of a quantification of the significance of those benefits.

Environmentally Superior Alternative

The DEMU Alternative is the Environmentally Superior Alternative for a scenario that does not include HSR on the Caltrain Corridor.

Typographical Errors

ES-16: "seal" on line 11 should be "sea."

ES-26: "affects to" on line 3 should be "effects on."

3.1-1: "kVA" on lines 25, 31 and 33 should be "kV"

- 3.1-14: "garaged" on line 6 should be "garage"
4-30: The sentence on line 25 is incomplete.
4-92: "increases" on line 17 is apparently meant to be "increased."
4-95: "dedicate" on line 27 should be "dedicated."
4-119: "construction" on line 2 should be "construct."
5-8 FN1: "4.5 gallons/year" should be "4.5 million gallons/year."
5-24: "steps" on line 21 should be "stops."
5-24: "less" on line 22 should be "greater."

Recirculation of the DEIR is mandatory

For the following reasons, recirculation is triggered:

- ES-12: Updated operations and maintenance costs must be subjected to public comment.
- Impact conclusions need to be revisited.
- The Air Quality and Greenhouse Gas calculations need to be redone.
- The impact of alternative OCS pole configurations on tree removal must be studied for the 5 cities whose trees were inventoried.
- Mitigation language for cumulative impacts must be tightened.
- Current DMU and DEMU performance data are needed and ridership modeling needs to be done.
- The TRANSDEF DEMU sub-alternative needs to be considered.
- A proposed service schedule for Blended Service must be published in a DEIR.

TRANSDEF appreciates this opportunity to shed light on this very complex project. Because we fully recognize that the decisions made on this project are make-or-break for Caltrain, we wanted to ensure that the full range of challenges will be considered. We sincerely hope that these comments will assist the JPB in making wise decisions.

Sincerely,

/s/ DAVID SCHONBRUNN

David Schonbrunn,
President

Attachments

Declaration of Kathy Hamilton

Email from Sumitomo Corporation, with fuel consumption simulation

Evaluation of Caltrain/HSR Initial Simulation

Historical evidence that electrification caused the 20th century epidemic of "diseases of civilization"