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Lillian Hames  
SMART General Manager  
750 Lindaro Street, #200  
San Rafael, CA 94901

Re: SMART Draft Supplemental Environmental Impact Report Comments

April 9, 2008

Dear Ms. Hames and SMART Board of Directors:

The Sierra Club Marin Group appreciates the opportunity to comment on the Sonoma Marin Area Rail Transit Draft Supplemental Environmental Impact Report (DSEIR). The Marin Group finds there are issues which remain unanswered in this report. The Sierra Club Marin Group's position regarding the project has not yet been defined. We ask our questions and make comments for clarification of the impacts and to have a more comprehensive understanding of the project as described in the DSEIR. We are looking forward to having additional analysis to answer remaining outstanding issues related to the project discussed in the DSEIR.

#### Executive Summary

1. Page ES-5, points ES.4 and ES.5: The DSEIR points out only one primary area of known controversy regarding the SMART project. We disagree with this conclusion. There are many other major areas of controversy still unresolved. There are concerns about traffic and parking in Larkspur; congestion in downtown San Rafael; no parking for southern Marin residents; inadequate shuttle service for Marin residents to get to the stations in Larkspur and Downtown San Rafael; freight operating at night since passenger service controls dispatch and will run during the day; uncertainty about funding; growth inducement; etc. The section, ES.4 must be expanded to contain more of the known areas of controversy and include discussion of the unresolved issues.

#### Project Description

2. Page B-4: There is a discussion of the Siemens "Desiro" light DMU's length, speed and capacity, but no description of the Bombardier's "Talent" light DMU's length, speed and capacity. Please include this information as well, so we can obtain a true comparison of these two light DMU's. Also, what is the difference in weight between the heavy DMU and light DMU's?
3. Page B - 4 and 5: Passenger capacity is "generally 130 seats" for the Desiro light DMU without taking into account the interior configuration. Approximately, what would be the number of seats remaining if a bathroom, storage for 10 to 20 bikes, and handicap and wheel chair accommodations

were included within the train? How much space would these occupy? How many seats would remain when these improvements are included?

4. Page B- 20 and 21: Please clarify: SMART plans to operate its service to Cloverdale north of the Healdsburg. NCRA is subordinate to SMART south of Healdsburg. Does NCRA control the easement between Healdsburg and Cloverdale? If so, is SMART subordinate to NCRA in this section of the track? How could this affect the Smart/NCRA Operating Agreement and control of dispatch between Cloverdale and Healdsburg if SMART is subordinate to NCRA between Healdsburg and Cloverdale?
5. Page B-23: The DSEIR states it is highly unlikely the NCRA could open the entire NWP line (including both the Eel River diversion and North End diversion). Does NCRA or NWP agree with this statement, that these future operations are highly unlikely? Documented information shows the NCRA's future plans are to operate freight service from Humboldt Bay, through the Eel River Canyon, down through Cloverdale and Novato, all the way to Lombard.
6. NCRA is in the process of producing its own DEIR. When NCR's EIR is complete, will SMART need to revise its own analysis to adopt to NCRA's own EIR conclusions?
7. Page B-23: If midday passenger service is not feasible, because the FRA's requirement when using light DMU's is to provide a dedicated "window" for daytime freight service operations, how will this affect SMART's passenger ridership, schedules, revenue, etc? Would the benefits associated with the SMART's proposed project need to be recalculated?

#### Regional Setting and Study Methods

8. Page C.2.5: Updated baseline information from EMFAC 2007 indicates the benefits achieved by SMART'S project by taking cars off the road may not be as large as identified in the 2006 FEIR. The DSEIR states these updated baseline changes do not warrant revisiting the analysis of the proposed project with new information. The DSEIR says this is because the project's effects with respect to other regional pollutants are beneficial and emissions such as NOx would continue to remain less than significant. How can the DSEIR come to this conclusion without any specific study? There is no analysis, other than mere subjection in these statements. SMART proposes to use a new type of Ultra Low Sulfur Fuel (ULSF). The 2006 DEIR and FEIR discussed SMART's use of biodiesel fuel. There is no longer a mention of the use of biodiesel fuel in the DSEIR. Biodiesel fuel was considered as an important means to emit less greenhouse gases than standard biodiesel fueled engines in SMART's FEIR (page 4-37). How does the ULSF compare to biodiesel fuel in the reduction of greenhouse gases in SMART's heavy and/or light DMU's? Please include updated information including a study of the NOx emissions using new baseline information to show how the DSEIR has arrived at its conclusions. Also, include a discussion of the reduction of greenhouse gases and toxic emissions of diesel particulate matter from biodiesel fuel verses ULSF.

9. Throughout the DSEIR, as well as the previous DEIR, FEIR, there is mention of “peak period” trips. What is SMART’s “definition” of peak period trips? This is not described in any of SMART’s EIR documents. This information would be helpful in understanding the EIR analysis and its continued reference to SMART’s operations in the DSEIR about peak period operations. Do the SMART EIR documents use MTC’s latest standard of four hour windows of 6 – 10 AM and 3 – 7 PM for their peak period time slot (MTC’s Transportation 2035: Change in Motion document, page 147), or does SMART have its own definition for what are their peak periods? Please clarify.

#### Weekend Passenger Rail Service

10. C3-2 and 3-3: Weekend traffic conditions for the DSEIR were performed on only one fall day, Saturday, October 6, 2007. Is it a truly valid method to determine traffic volumes and congestion in a major corridor by having information collected on only one day? Would a more accurate measure of congestion be established by monitoring weekend traffic over several different Saturday and Sunday's and several different months? Is a traffic study truly credible when on the one day studied, the traffic counting sensors were disabled in Central San Rafael? How can a study be valid when no traffic study was performed on a Sunday as well as only one Saturday to determine weekend traffic congestion levels? In order for this study to be reliable the weekend traffic volumes and congestion in this major corridor must be redone in order to obtain accurate information to adequately compare and understand the SMART corridor and its environmental impacts such as pollutant emissions.
11. C.3-5: If no shuttles are scheduled to operate on weekends, and if public weekend transit service is limited, how will residents and tourists get to the train stations as well as their shopping, social and tourist destinations? Is it valid to presume people will easily be able to ride the weekend trains if they are severely hampered by limited public transit to and from the stations or restricted ability to use autos and park at several key train stations? How has the lack of connectivity been reflected in the ridership numbers and total energy consumption and greenhouse gas emissions?
12. C.3-9: Would GGTD, MCTD or SCTD weekend bus schedules coordinate in a timely manner with weekend train service without negatively affecting local weekend bus routes?
13. C.3-5: Would a family pay for a taxi to get to and from a train and then pay an additional family fare for a train ride? Would the total cost of the family’s trip be less by merely driving in their own vehicle to their destination? The example of passengers paying for taxis to arrive at a station and then to pay to ride the train in the DSEIR should be deleted as it is unrealistic.
14. On page C.3-6 it presumes 2,020 rail trips would be made on a Saturday. Is this 1,010 passengers each way? How many riders would ride the trains on a Saturday and on a Sunday from point A to point B? What times of the day would have the highest and lowest number of riders from point A to point B.? There has been no ridership study or survey to show how many tourists and/or residents would use the train on the weekends. The DSEIR’s

conclusion is based primarily on assumptions. Other than comparing the SMART service primarily to the Capitol Corridor rail service, which is technically in intercity train (different than the SMART corridor), to reach the Saturday weekend ridership number is inadequate. There was no other study performed. In the 2006 DEIR actual ridership numbers were studied in the Travel Demand Forecasting Report detailing where a specific number of people would board and alight from the train at specific stations along the entire length of the SMART line. This portrayed a more factual method of determining ridership numbers. We are unable to find any such study or analysis in the DSEIR showing how the ridership conclusions were reached other than from looking at other rail services and merely deducing a percentage number from other rail operations.

15. C.3-6: Would the projected total of 2,020 ridership be cost-effective for SMART to run a weekend service? Is SMART's weekend service, which it states on page C3-9 is more likely to appeal to tourists than residents, be a cost effective use for Marin and Sonoma tax payers' dollars? How will climate and time of year impact tourist revenue? This discussion should be included in SMART's financial analysis.
16. C.3-13: Are the estimates of direct and indirect annual energy consumption for transit bus and passenger vehicles estimated presuming the passenger rail cars are filled to capacity? The analysis is incomplete as to how many automobile users have been diverted from the highway since we have no quantified information regarding the number of people riding the weekend trains. The ridership assumptions in the DSEIR are based primarily on a comparison with the Capitol Corridor commuter rail services weekend service. Without the DSEIR completing a more in-depth Travel Demand Forecasting Study of weekend service in the SMART project area, it is unclear how the DSEIR is able to correctly compare weekend passenger service to the number of vehicle miles traveled (VMT) in relation to overall net energy reduction with rail service. How can the estimates of comparing energy consumption in Table C.3-8, page C.3-13, of passenger vehicles, transit buses, and passenger rail be valid without also knowing a more accurate number for the passengers the weekend train will rationally take off the highway. If the trains only run one quarter to one half full, what would be the VMT relation to direct and indirect energy use? Please include a more comprehensive study and analysis to validate the DSEIR's conclusions about energy saved from diverting auto trips to rail service.

#### Alternative Train Vehicles – Light DMU's

17. C.4-1 through C.4-3: In comparison to the 2006 EIR information regarding emissions levels as well as energy use, the DSEIR does not distinguish between the biodiesel fuel standards for the heavy DMU versus the light DMU. How do the light DMU's compare in energy and pollutant levels to the bio diesel heavy DMU? This comparison is missing from the DSEIR. Please include.
18. C, 4-4: What are the vibration impacts to residents along the track? The DSEIR only discusses noise impacts, but fails to mention vibration impacts in this section.

19. The DSEIR fails to discuss the noise and vibration impacts to riders traveling inside the light DMU. What would be the difference between the light and heavy DMU's passenger experience in regards to noise and vibration? This is not discussed in the DSEIR.
20. Will the light DMU be as easy to enter and exit the passenger car as the heavy DMU? The heavy DMU was said to be lower to the ground and station platform so bicycles, passengers and handicap passengers would have easy and quick access to the vehicles. Please explain.
21. The light DMU is proposed to use new ultra low sulfur fuel (ULSF). Will there be a cost savings or cost increases to SMART from using ULSF versus standard diesel fuel? Do heavy and/or light DMU's obtain the same fuel economy and efficiency using standard diesel fuel, ULSF or biodiesel fuel? When projecting SMART's financial analysis, this information should be included regarding the difference in cost of using different fuels? With the cost and availability of fuels continuing to sharply escalate, this is an important consideration for the long term financial viability of SMART.
22. The DSEIR fails to discuss the maintenance requirements of the light DMU. Would the maintenance requirements be the same for the light DMU as the heavy DMU? This was discussed regarding the heavy DMU in the 2006 EIR. Would an engine using ULDF require more maintenance than one using standard diesel or biodiesel fuel? Where would the light DMU's be maintained? Would all the maintenance be performed in Cloverdale? What is the availability of parts for the light DMU? Are the parts for the light DMU coming from Europe, since the light rail trains under consideration are primarily European in origin? Would the trains need to be taken off-site for servicing? If so, how will they be transported and how far? Are the costs associated with maintaining the light DMU the same as the heavy DMU? Are the fuel costs for operating the light DMU the same as the heavy DMU? Please include this information in a cost comparison in the financial analysis.
23. There is no discussion in section C.4 in regards to the FRA requirements for the differing time separation standards of a light DMU versus heavy DMU in relation to operation on the same single track with freight trains. Please include this information. Also, what are the steps required to achieve FRA approval in order to use light DMU's versus heavy DMU's on the same single track with freight operations? How long does it take to obtain such a FRA approval? What are the chances, in percentage, the FRA will grant the use of light DMU's versus heavy DMU on the SMART right-of-way? How many times has the FRA allowed light DMU's to share the same single track with an operational freight service?
24. SMART plans to begin operations with a limited startup operation schedule. (See page 2-9, section 2.4.4 reference to start up service in SMART's DEIR) NCRA's freight service also plans to begin freight operations with a somewhat limited operation schedule, particularly in its first year of operations. Over time, both the NCRA and SMART plan to expand their services. If SMART, as claimed, has control over dispatch of the freight

operations and SMART expands its service schedule using a light DMU in the future, what would happen to freight's schedule if they too expand their operations? When using a light DMU, the required window for time separation by the FRA is most likely to be a much greater separation than the 30 minute lead time for a heavy DMU. Would freight be able to continue to operate in off-peak times during the day? Would freight service be pushed into operating during more evening and night time hours? If both freight and SMART light rail DMU service expand, how will this affect the operations on the same single track? If substantial time separation is required between freight and light DMU trains, how will this requirement impact the future ability for SMART to expand its service? What would need to be arranged regarding scheduling of freight and light DMU passenger service if and when either one or the other services expand? How would they meet the FRA requirements for specific time separation?

25. Please evaluate the impacts of expanded schedules of both light DMU and freight service in regards to noise, vibration, safety, scheduling, etc. The DSEIR fails to evaluate the cumulative impacts to the light DMU service with scheduled expansions planned for both freight and passenger service. With the increased window of time separation by the FRA, the impacts from expanded light DMU passenger service will be different than the impacts from a startup light DMU passenger and freight service.

#### Novato South Station Alternatives

26. C.5.-39, Impact BR 8 (Oaks): The DSEIR mentions at the Hamilton station, potentially 15 large oak trees might be removed as a result of clearing the land for development of the station. A 3 to 1 ratio for replanting is a mitigation measure required for the removal of oak trees. Is it possible, to preserve and move the existing large oak trees to another location at the same station site and used for screening the station from residents on Marblehead Lane and Chapel Hill Road? This would be a way to preserve the trees on-site. Will these trees be removed during times when birds are not nesting?
27. C.5-42 & 43, C.5.3.7, Setting: The Hamilton site is crossed by transmission lines and has several transmission towers along the perimeter. In order to improve the visual quality of the area and reduce the number of exposed transmission lines, would SMART consider undergrounding these lines at the same time they'd be installing the Hamilton station and its utilities? Would this be a benefit as well as mitigate some of the impacts of the station and rail line to the adjacent school, athletic field and nearby residents?
28. C.5-45, Impact V-2: There is only a discussion in the DSEIR of the new sources of lighting at night from the station and parking lot. During winter months would there also be early-morning light shining from the station, parking lots, as well as vehicle's lights in the parking lots? How could this be mitigated?
29. C.5-60, Table V.5-6: There are projected to be between 220 - 250 riders boarding at the Hamilton station. How many of these riders will ride North to Sonoma or South toward Larkspur? What percent of riders, at this station, will be from residents residing in the neighboring area or from commuters to

jobs in the surrounding area? This is not explained in Table C.5-6. The table merely “lumps” the number of all boarding passengers together. The 2006 DEIR included a Travel Demand Forecasting Report which portrayed a more accurate analysis regarding the number of passengers boarding and alighting at a station. The DSEIR should include this same type of analysis in order to understand and compare the Novato South Alternatives.

30. C.5-33: The Hamilton station alternatives are said to be somewhat removed from the nearest freeway interchange and from Highway 101. The DSEIR states it is assumed the Hamilton station location is not to be under consideration for a potential Novato bus transfer center for Marin County Transit. What are the pros and cons regarding connectivity to other public transit if the Hamilton Station is not located at the same site as the Marin County Transit’s proposed northern transit hub?
31. C.5: Would it be possible to have a Novato North, a Downtown Novato plus a Hamilton station in Novato? Would 3 Novato stations be more convenient and induce the opportunity for more riders in Novato to use the SMART commuter train? How would three stations in Novato affect SMART’s schedule and ridership numbers?

#### Revised Cumulative Impacts

32. C.6-2: SMART’s heavy DMU passenger train time separation between freight trains may be no closer than 30 minutes behind their leaders. Is this 30 minute separation requirement the same when using heavy and/or light DMU’s? If this 30 minute time separation is only for heavy DMU’s, what would be the amount of time separation required between light DMU’s and freight? The DSEIR only discusses one potential alternative for light DMU’s; a time separation using Positive Train Control (PTC). What would another alternative for light DMU’s then using PTC with freight sharing the same single track? What would be the required amount of time separation with or without use of PTC?
33. C.6-2 and 3: FRA currently has not approved the use of light DMU passenger service on the same single track as freight service using PTC (Positive Train Control). When might FRA make such an approval? What is the chance, in percent, PTC will be approved and for allow light DMU’s to share the same single track with freight service? If the chances for approval by the FRA is in the distant future or of low probability, should SMART realistically be considering using light DMU’s for its passenger service? If SMART initially purchases heavy DMU’s to start up its service and later on decides to change train cars and purchase light DMU’s, what changes would be required to SMART’s schedules, tracks, signaling, etc. and its relation to freight service. Please have the financial analysis include the cost of SMART first purchasing heavy DMU’s and then later on, when changing to light DMU’s, the new additional capital costs to make this change. Would it be cost-effective for SMART to purchase two different sets of (heavy and light) DMU’s over a 10 to 20 year period?
34. C.6-2 and C.6.5.2: Hours of Freight Operation and System Capacity: SMART’s current peak hour schedule is actually the basis for SMART’s

startup schedule of operations. (On page 2-9, 2.4.4 of the DEIR it mentions this is SMART's start up schedule for operations.) After a few years of operations SMART has publicly stated it hopes to be able to expand its hours of operation and scheduling to increase its ridership. How would this expanded schedule and hours of operation impact SMART in relation to start up and expanded freight operations? Please discuss this in relation to freight startup service as well as potential expanded freight service and expanded SMART passenger service.

35. C.6-3: Freight Service Track Repairs: Would NCRA's track and bridge repairs between Cloverdale and Highway 37 meet the level of standard required for SMART's passenger trains? If not, would SMART need to redo and/or upgrade the track and bridge repairs made by NCRA? If NCRA decides not proceed with its track repairs and freight operations, would SMART need to pay the entire cost for upgrading the tracks from Healdsburg to Highway 37? Has SMART's financial plan factored in SMART paying the entire cost of upgrading the tracks and bridges without the financial assistance of NCRA's project? When preparing SMART's financial analysis, include the cost savings or expense to SMART regarding the coordination of costs of track and bridge repair between SMART and NCRA.
36. Would light DMU's require a different level of track improvements and a higher or lower quality of track than required for heavy DMU's?
37. C.6-3: Would increased level of freight service, due to the heavier weight of freight cars than passenger cars on the same single track, cause the tracks quality to deteriorate at a faster rate? Would this require more maintenance by SMART in order for SMART to maintain its faster train speeds for its light DMU passenger service than is required for freight service? Would a heavy DMU be more "forgiving" during its operations along a deteriorating tracks condition than a light DMU?
38. C.6-3: Freight Sidings: NCRA has indicated in their letter to SMART dated November 27, 2007, page 4, number 13, the location of four new freight sidings. Would any of these sidings interfere with the bicycle/pedestrian paths that SMART plans to construct parallel to their tracks? If so, what might be the impacts of these sidings to the bicycle/pedestrian paths?
39. C.6-5 and 6: The DSEIR mentions the length of time a freight train would take to cross an intersection is dependent on the speed and length of the train. It states a 60 car freight train could take up to three minutes to pass through an intersection? What is the total length of a 60 car freight train including engine and caboose? In Ap. 2-5 it states that each freight car is 67'7" and a locomotive is 62'6". This means a 60 car freight train would be approximately 4,118 feet long. Would a train of this length extend across more than one intersection at one time when analyzing the various crossings between Cloverdale and Highway 37? What is the length of a 40 car train? Is this about 2800 feet long? Is the average city block between about 264 feet (New York City) to about 500 feet (World Trade Reference)? If so, which intersections and how many would be impacted by a 60 or 40 car length train? Provide information detailing the locations where more than one

intersection would be simultaneously blocked and for what period of time if a train is traveling about 20 -25 mph. How would this affect the cumulative impacts between freight and passenger service? How might this impact the ability for emergency vehicles and/or the public to cross tracks if more than one intersection is blocked during the same period in times of emergency?

40. C.6-7, C.6.2.2: Both Speculative Scenario One and Two discuss cumulative impacts between SMART and freight as only freight service expands. Please also include a discussion of cumulative impacts of freight, as it increases its frequency of use along with the increase of SMART's passenger service beyond its currently proposed startup level of service. (Page 2 - 9, 2.4.4, of SMART's DEIR stated this was SMART's startup service.) How would this cumulatively impact vehicle delays at crossings? How might this affect the scheduling of freight trains along with passenger train service?
41. C.6-13 and 14: Freight service which travels at speeds greater than 25 mph would have noise that exceeds 60dBA Ldn at 50 feet. If SMART expands its service or chooses to use light DMU's, (which could cause freight to operate in early morning, late evening or night time), the noise and vibration impacts to homes and other facilities along the railroad right-of-way will have significant cumulative impacts. Would a 60dBA, noise spike of two minutes, when people are sleeping, have a greater impact than daytime noise? What would be the long-term cumulative impacts on people living close to the tracks from the continued nightly disruption of their sleep? Would this sleep disruption in the evening and/or night occur if freight trains were not forced to run at evening and/or night times, since passenger trains have priority to run during the day?
42. C.6-15 and C.6-6: This section discusses vibration. On page C.6-15, it says a 60 car freight train will take less than two minutes to pass at 25 mph. On page C.6-6, it states it could cause a delay from 87 seconds to slightly more than three minutes. Thus, there is a difference of approximately one minute of delay between these two references. Please clarify the difference between the two references. Which delay time is accurate?
43. C.6.18: The DSEIR states midday trains, if the light DMU is selected to run along with freight service on the same single track, might be eliminated due to the FRA's requirement for strict time separation. How would elimination of the midday train affect SMART's projected ridership numbers? What was SMART's purpose for having a midday train? Who will be affected by the elimination of the midday train? When developing SMART's financial analysis, discuss the changes of ridership and financial implications to SMART from the elimination of the weekday midday train service.

#### Project Alternatives

44. D.2: Bus Service: The DSEIR concludes that the weekend rail passenger service will offer an environmental advantage over express bus service on the weekends. How did the DSEIR reached this conclusion? This conclusion appears to be mere assumption. If the bus service is not discontinued, is not the weekend SMART service just an added source of energy consumption and greenhouse gas emissions? Is SMART proposing that the Route 80 bus

be discontinued? There is no information given in the DSEIR regarding Golden Gate Bridge and Transit District's weekend bus service. Route 80 runs every day, including weekends, from Santa Rosa to San Francisco. Golden Gate Transit states it takes the same amount of time on the weekends to travel from Santa Rosa to San Francisco by bus as it does the express bus which runs on weekdays. How many buses run on the weekend in the same corridor as the proposed weekend rail service? The weekend rail service will not offer any connecting shuttle service to the train. Would the weekend train service connect in a timely manner with the weekend ferry and/or public bus service? Compare Route 80 bus from Santa Rosa to San Francisco, to the train plus its other required modes of transportation on weekends. The comparison should include the length of travel time and convenience. Also, evaluate weekend trains required connecting service verses Route 80 bus direct service from San Francisco to Santa Rosa. Compare this for both Saturday and Sunday weekend service. What would be the ridership numbers for weekend rail versus weekend bus service between Santa Rosa and San Francisco? Would people be able to reach their final San Francisco or Santa Rosa destination more readily by rail versus bus on the weekends? Please give information used by the DSEIR to reach its conclusion that passenger rail would offer environmental advantage over weekend bus service. Evaluate this including the analysis that both bus and train are operated using diesel-electric hybrid technology.

45. D-2: The DSEIR states "passenger rail service would continue to offer environmental advantages over bus service in these same issue areas,...lower energy uses and emissions... Utilizing light DMU's would further increase environmental advantages due to better fuel efficiency, fewer emissions and reduced greenhouse gases." Golden Gate Bus will implement, in December 2008, new bus service using fuel cell-battery hybrid buses. MTC is currently assisting bus transit agencies to purchase alternative fuel buses, such as diesel-electric hybrid buses and other types of buses using zero emission technologies. San Mateo Transit District is currently running three zero emission buses. Golden Gate Transit has acknowledged they could operate their express buses as well as regular bus service using new technologies. Would these changes to new clean air buses alter the conclusion that rail service is superior to bus or express bus service over the 20 year period of a light or heavy DMU dependent on using ULSF or engines changing to use diesel – electric hybrid technology?

Thank you for allowing the Sierra Club Marin Group to share our questions and comments regarding SMART's Draft Supplemental Environmental Impact Report. We look forward to hearing the FSEIR responses.

Yours truly,

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Sierra Club Marin Group Transportation Chair