



CITY COUNCIL RAIL COMMITTEE

Special Meeting
April 28, 2011

Roll Call

Council Member Klein called the meeting to order at 8:00 a.m. in the Council Conference Room, 250 Hamilton Avenue, Palo Alto, California.

Present: Burt, Klein, Shepherd, Price

Absent: none

1. Oral Communications

Jerry Carlson, Atherton Town Council Member, noted he had recently attended the Assembly and Senate Transportation Committee Hearings. He noted hearings on SB-22 were also coming up shortly. He noted the importance on speaking up on the issues of High-Speed Rail (HSR) and expressing personal views to the Senators.

2. Continuation of Discussion of Caltrain Informational Matters

Presentation by Paul Dyson, President, Rail Passenger Association of California (RailPAC)

Paul Dyson, President, Rail Passenger Association of California (RailPAC), spoke regarding RailPAC. He stated it was an all volunteer organization. Their goal was to advocate for rail access. He gave an overview of RailPAC's history and rail work. Their mantra was value for the taxpayer when it came to successful rail projects. He noted he was also the Chairman for the City of Burbank Transportation Commission, which was on the route for High-Speed Rail. He stressed the key issues for High-Speed Rail were incremental growth and value for the money. He noted the public demanded something to show along the

way or their support and funding would be lost. Management staging must contribute to the long-term outlook. He outlined a synergistic system with daily service gradually connecting everyone in the end.

Council Member Price discussed potentially consolidating the various rail services which lead to the question of what works best while making use of what was already there, or should the entire rail system be revamped.

Mr. Dyson stated initially one makes due with what they have. The first issue was to put an inventory together and decide what to do. The business was of common standards, to do something at the State level, with later Federal standards for compatibility. He stated there might also be trades later for equipment and there may be secondary markets with other cities. He reiterated an organizational plan is the first step, followed by the plan for what will ultimately work best for the next generation of rail travelers.

Council Member Price asked if he was talking in terms of a dedicated fixed rail agency in the future.

Mr. Dyson stated, in an ideal situation, all transit would go under one umbrella. He said they tried this in Britain many years back, where the British Transport Agency tried to cover every base, but the organization became so complex it was difficult to remain effective across all boards. He stated too many small organizations are also difficult to manage. So there has to be a happy medium.

Council Member Price asked if he had any idea how many of these organizational conversations had taken place.

Mr. Dyson said as an all-volunteer group they were not able to keep up with all the legislation.

Council Member Burt spoke to Plan B, then asked if RailPAC had reviewed the ridership projections for Plan A.

Mr. Dyson said RailPAC had reviewed the reports. They did not have the resources to do their own study. The original projections were extraordinarily high and not credible in his opinion.

Council Member Burt asked how they reviewed the ridership numbers and what their baseline was.

Mr. Dyson stated they used a formula for electrification. The upgrades included a faster journey time. Typical conversions increased ridership by 20-25%

immediately. Another key factor was punctuality. More reliable services brought in more people.

Council Member Burt asked if the ridership studies RailPAC had worked on used transparent data.

Mr. Dyson said they only had access to information that was on the public record.

Council Member Burt said he asked because Palo Alto had a subsequent ridership revision report by Mr. Van Ark which included confidential paperwork with some data not on the public record. He asked if Mr. Dyson knew of any public interest reason why that information should be kept from the public.

Mr. Dyson said he could not think of a reason, even if they were trying for a contract with a private operator or some other entrepreneurial offering.

Council Member Shepherd said she agreed with statements regarding the difficulties with public transportation in the Bay Area. She agreed that a Northern California Rail Association was necessary. She asked Mr. Dyson if he considered BART among the rail services in the area.

Mr. Dyson stated BART was also a rail service, though more specialized and more like a subway or domestic commuter train.

Council Member Klein asked about Caltrain and electrification. He asked if it was necessary, or if there were other options.

Mr. Dyson said the advantage of electrification was performance. He stated business plan for Caltrain was to receive funds for electrification so they can reduce operating funds. He added public funds had to be used carefully. He discussed some of the rolling stop issues as well. He noted the overhead support masts on the electric trains do have an environmental visual impact on cities that some people feel is a negative impact.

Council Member Klein asked if there were diesel multiple unit (DMU) systems that meet Federal Railway Administration (FRA) standards.

Mr. Dyson stated there had been some prototypes, but he did not believe any had met the standards. He said there were some noncompliant nonsegregated lines running. He said it was possible to build noncompliant DMUs, but they are heavy and do not perform as well.

Council Member Klein stated the budget for electrification was approximately \$1.5 million. He asked what it was if they used DMU and tried to meet the Federal standards.

Mr. Dyson said it would be considerably less, although he did not know it offhand. He stated he was talking about the rolling stock without the related infrastructure and it would be 25-30% less the cost of electrification.

Council Member Burt asked about the Federal Standard. If they do not have a waiver they could not have a lighter weight stock. It was his understanding that the High Speed Rail negotiations included the freight use from the passenger rail use. If that occurred, then did they have a barrier to hybrid DMUs.

Mr. Dyson stated there were no barriers. This came down to the FRA and the signaling system.

Council Member Burt stated there was also the positive train control implementation on the horizon, which would add to safety in the future.

Mr. Dyson agreed this added to track safety.

Council Member Burt asked, with the addition of this and track safety, was there discussion on liberalizing the compatibility standards.

Mr. Dyson said this was under review but no decisions had been made.

Council Member Price asked about the freight and commuter train system in Britain, she wanted to know if there were a lot of grade separations.

Mr. Dyson stated for sections immediately outside London there is grade separation, but further out in the country there are grade crossings. He stated this is a big issue in the US with a number of grade crossings. He noted it was always a battle between city, rail and highway departments as to who was responsible for this.

Council Member Klein discussed DMUs and hybrids. He asked if RailPAC had information on the technological advances in these areas.

Mr. Dyson stated there was a lot of information in the public domain today he kept in touch with colleagues to stay knowledgeable about current issues. He recently visited the Siemens factory in Sacramento. Many organizations of made their information public.

Council Member Klein asked if there were a location where the most up-to-date hybrids are being used.

Mr. Dyson stated Europe was currently using the most up-to-date hybrids.

Jack Ringham spoke as a commuter train expert. He stated that he had been riding trains all his life, as well as studying Caltrain and electrification. He felt it was impractical to electrify Caltrain at this time. He gave some suggestions and alternatives to High-Speed Rail. He noted the Environmental Impact Report (EIR) was stale and based on old data. He discussed the EIR Electrification Plan and its proposals. He continued his presentation with the two Non-Electric Alternatives and discussed both. He spoke on the Passenger Demand Patterns Required for Varying Train Sizes, which he said for weekday passengers per train in varied in capacities and time periods. He looked at the Capital Cost categories from the EIR comparing the DMU and EMUs (electric multiple unit). He went over what Caltrain should consider for the future in that there was a lack of funding and no hope to make up any gaps. He suggested an evaluation of the DMU versus EMU issue. He further stated they should not make a commitment without dedicated operations funding.

Council Member Shepherd asked if DMUs had a similar reduction in operational costs as electrification would.

Mr. Ringham stated most of the same savings claimed by the proponents of electrification could be achieved with DMUs. He stated that BART, which is already electrified along its whole system, has planned on investigating more based on the DMUs because they found electrification costs too much.

Council Member Price stated, typically, alternatives were examined, including technical alternatives. She asked if the current electrification EIR examined such things as DMUs.

Mr. Ringham stated Caltrain analyzed and made several comparisons of liquid natural gas and clean diesel. They analyzed and rejected these alternatives although they provided the public with no details of the analysis. They analyzed electrified locomotives with unelectrified cars as well and concluded it was less effective than EMUs. They did not evaluate DMUs. Their comparisons were to diesel power based on their present diesel system, which was based on old technology. This was not considered an updated DMU comparison.

Council Member Price she had heard of two-level rail cars. She asked if there were cars with a taller vertical approach reach than the two-level cars.

Mr. Ringham said the overpasses would have to be raised, so to his knowledge there was no consideration of increasing the height of the cars at this time. He stated most EMU and DMU cars were single or bi-level. He thought Caltrain's plan was to use bi-level cars.

Council Member Burt said the break-even point was 4-6 cars per train with the DMU. He asked if there were any constraints or operating cost impacts of going up to a higher train length.

Mr. Ringham stated higher train lengths meant longer boarding platforms.

Council Member Burt stated they were at 4-6 cars per train now, as a break-even. He asked if they were constrained against going higher with the DMUs.

Mr. Ringham said the current range was five, they fell below that. Presumably, the increase in passenger volume was covered by more trains per day rather than more cars per train.

Lauria Lorono, Caltrain Engineer, brought the 35% drawings of the electrification project and left them with the group. The materials could be shared with the public. She gave a brief slide presentation, which included items, which the committee had previously requested including information on the Electrification Project (04/13/11), Electrification 35% Design (04/28/11), EMU versus DMU (05/26/11) and HSR and Caltrain Memorandum of Understanding (MOU). A second slide covered the Key Components of PTC/CBOSS (Positive Train Control/Communication Based Overlay Signal System), the electrification project and the service expansion as well as the Guiding Principles of addressing structural deficits, providing more services and improving the environment.

Marian Lee, Chief Planning Official, gave the highlights of the 35% design in her slide presentation. She noted the Electrification Project would electrify the tracks for a distance of 51 miles from San Francisco to Tamien, servicing six trains over peak hours and directions with electric powered vehicles. The main components of electrification were the traction power supply (TPS), the overhead catenary system (OCS) and the communication system. The traction power supply system supplies 25kV with two main substations at South San Francisco and San Jose, which transforms 115 kV utility supply down to 25kV, using seven paralleling stations and one switching station. She went over a table of the power traction sites, and the cities where they were located with the main substations. She summarized the TPS sectionalizing plan with the main substations and the midline switching stations and paralleling stations.

She showed an example photo of what a TPS substation would look like as well as a TPS paralleling station. She discussed the overhead catenary system. This would be a system of overhead wires supplying power to the electrified vehicles. Poles would support the overhead wires. Poles would be 30-40 feet high and 150-200 feet apart, located outside the tracks but within the right-of-way. Cantilever arrangement for two-track areas and headspan arrangement for multi-track areas are planned. She showed a photo of an example of the cantilever support wires as well in a rural and station setting as well as a headspan arrangement at a station. She discussed the communication system, which will provide a link for operations of the electrified system. She also discussed the fiber optic components. She noted the communications system provides a support network for existing and future control and information systems. The schematics of the integrated supervisory control and data acquisition (SCADA) control center and its field devices. The Rolling Stock Preferred Unit was an EMU, self-propelled unit. Performance was not affected by train length and unaffected by gradients greater than 2% Electrification progress was discussed. The TPS study and electrification simulations were completed as well as OCS conceptual drawings and standards, operations and maintenance analyses, reporting and estimates. Preliminary safety and construction reports and estimates were complete. The PG&E feasibility study and the 35% design of TPS, OCS, signals and communications plans and specifics were also complete.

Council Member Price asked what had been done, or not done, from an alternatives perspective with respect to the EIR.

Ms. Lee stated the Guiding Principles included a note on the purposes of the project, which were identified in the EIR. One was to reduce emissions and be environmentally friendly. Based on that anchor, they looked at the preference of EMUs, and what was actually true. They did not look at diesel, but more of the green technologies and four or five alternatives including BART-like and other light rail technologies. This is how they landed on electrification as a viable option.

Council Member Price asked for additional information on the PG&E Feasibility Study.

Ms. Lee stated they looked at the determination of power usage versus power draw. They wanted to look at the draw on the current PG&E system.

Council Member Price asked if there were any other options other than the overhead catenary system for electrification wires. She stated there were some elegantly designed catenary systems they could consider.

Ms. Lee stated, given the current infrastructure variables, it was the best choice.

Council Member Burt stated during the evaluation of alternatives an overriding objective had been to reduce emissions. Other modes also had reduced emissions and yet electrification still was selected. He noted that the mode of producing this electricity may not be the greenest choice.

Ms. Lee stated the fair way to put things was that the technologies that reduce diesel dependency were still the best green choice. This was not the framework used when the EIR was set up.

Council Member Burt asked how they track a specific objective when it is both the premise and the conclusion.

Ms. Lee stated in the purpose of the project was to improve regional air quality.

Council Member Burt asked if DMUs might not also improve this air quality.

Ms. Lee agreed it would.

Council Member Burt asked when the technical alternatives were evaluated in the EIR.

Ms. Lee stated they were evaluated in 2004. The way the project was defined in the EIR was that the primary purpose was to improve train performance, reduce noise, improve regional air quality and modernize Caltrain. She also gave an overview of the specific alternatives they looked at.

Council Member Burt stated various fuel forms were looked at as far as air quality and environmental factors. It did not sound like a variety of other alternatives were included. He also spoke to electrification funding concerns. He asked what existed as alternatives if they could not electrify the system.

Ms. Lee stated the policy and the vision was to electrify the system. She stated their alternative remains how to retain service while still trying to find the funding for electrification.

Council Member Burt asked if there had been any intention to bring in a wider variety of policy members.

Ms. Lee noted these were discussions within Caltrain. They are also reviewing

opportunities for public process to engage local and City partners to develop strategic planning. The work program was under consideration with the board.

Council Member Burt suggested input from experts as well and noted there were a number of them in the region. He asked where the train stopped at Tamien and the Baby Bullet Service.

Ms. Lee stated the goal was full electrification but there would be transition up to that point.

Stacy Cooke Senior Planner, Caltrain stated diesel service would operate underneath the electrified system.

Council Member Burt discussed potentially having to switch trains mid trip with this dual usage.

Ms. Cooke stated if there was no electrified system they would have to provide diesel.

Council Member Burt asked what the peak number was for proposed trains per hour.

Ms. Lee stated the peak number was six trains per hour, where they were now running five trains per hour carrying 70,000 riders, where they were currently at 40,000+.

Council Member Burt noted it sounded as if predictions for increased ridership were expected during the shorter periods.

Ms. Lee stated ridership was demand and looked out to 2035 as the horizon year and was based on the population and job growth numbers if this type of service was provided.

Council Burt asked if the constraint was the foremost demand at peak hours. He said if they reach capacity at peak hours, how could they expect to go up to really high numbers just by adding one additional train.

Ms. Cooke stated another way to look at it, out to 2035, was that there was only a 10 percent increase from what they called the no project, or keeping the service the same. That made it an apples-to-apples comparison.

Ms. Lee stated the peak ridership is definitely higher.

Council Member Burt stated they were looking at 70 percent rise in ridership.

Ms. Cooke said they would demonstrate spread of what they can fit on the train at a future meeting.

Council Member Burt said it was important to show how so many people were fitting on trains that required a great amount of funding.

Ms. Lee repeated they would provide additional information on this at the next meeting.

Council Member Klein said he questioned some information presented on the substation on the Palo Alto/Mountain View City line during the slide presentation and wanted to be sure that his substation still existed.

Ms. Cooke looked this station up in the materials and pointed it out its exact location as he continued with his questions.

Council Member Klein continued with a question about what grade separations, if any, were required in the proposed project.

Ms. Lee stated none were proposed.

Council Member Klein stated he had heard the opposite.

Ms. Lee was not clear on why he would have heard otherwise. She stated the grade separations were in discussion for the High-Speed Rail project but not specifically for the electrification project, alone.

Council Member Shepherd stated it was her understanding that once you go over 79 MPH, you were required to have grade separations.

Ms. Lee stated this was not her understanding. The trigger speed was 125 MPH.

Council Member Shepherd stated on the FRA it was different versus Caltrain's trigger of 125 MPH.

Ms. Lee stated it was her understanding that ranges of speed triggered different interest levels from the FRA. She stated their regulations addressed these increments. She stated she would provide the information they have from the FRA.

Council Member Shepherd said there would be one train every five minutes. So every time there was a signal, there would be four minutes for traffic to flow. Without grade separations, she said this will cause traffic concerns. She asked if there were any plan to look at grade separations in the EIR.

Ms. Lorono stated it was a prototypical schedule so far, so this is not written in stone. It was based on the assumption that the train was running at 79 MPH. The train running every five minutes was a visionary statement laid out by Caltrain. The electrification project was up to six trains each direction. Today, they were at five trains, peak hours, in peak directions.

Council Member Burt said they are talking about what translates to a train every five minutes.

Ms. Cooke said there will be 12 total, with one additional train.

Mr. Seamus stated this was an additional train per hour, and this was a train every five minutes.

Council Member Shepherd stated her concern was the bogging down of the intersection.

Mr. Seamus stated they were going from a train every six minutes, to a train every five minutes.

Council Member Shepherd stated this brought with it the resynchronization of the lights every four minutes and the bogging down of traffic at the intersections.

Council Member Klein returned to the issue of the EIR and why they did not consider DMUs. He questioned whether this was a lifecycle analysis or not.

Ms. Lorono stated they will find this out.

Council Member Klein questioned whether the EIR considered DMUs. This should be studied as well a lifecycle analysis.

Ms. Lee stated she would find information on this and bring it to the next meeting.

Council Member Klein asked if they considered the very extensive range of environmental impacts. He also discussed operating efficiencies. He desired a quote on how efficient the electrification system was with the same number of

riders. He asked if there were cost per mile figures, for car travel under the electrified system compared to what they had now, and compared to the other alternatives.

Ms. Lee noted his comments and concerns and stated information on these would come back at the next meeting.

Ms. Cooke took the time to update Council Member Klein on the previous substation he had asked about on the Mountain View and Palo Alto border. She stated she could followup with a better slide of this substation at a later date. The dimensions of this station were 40x80 feet with a height of 30-40 feet. A slide was also on the screen for a time as they discussed the profile of such a substation.

Council Member Shepherd spoke to the photos of the planned stations.

Ms. Lee stated the examples they had shown had four tracks.

Seamus Murphy, Manager of Government Affairs, Caltrain stated the graphic they had used for an example was Bayshore.

Ms. Cooke stated the plan was to electrify the current system and current stations.

Council Member Shepherd asked how complete their plans for electrification were.

Ms. Lorono stated the project that they could least afford was the electrification project. The \$1.2 billion would not include grade separations, but if the City had concerns over traffic impacts, they would work to determine where best to make improvements.

Mr. Murphy added the total project cost was \$1.2 billion for electrification plus the rolling stock, but they need to consider the cost of the positive train project in the cost of modernizing the train corridor.

Council Member Shepherd stated they had not talked about the Action on the EIR that they have had since 2004. She asked if Caltrain considered this an active or stale EIR.

Ms. Lee stated they did an assessment of technical studies in 2008 with a clean update. She stated right now they feel they have an updated document. She stated they would like to certify it though there was the threat of a lawsuit,

which they hope to avoid that time-consuming process. They hope to take this back to the board in the summer. A key decision is pending the discussions regarding the lawsuit.

Council Member Shepherd asked what happened with their MOU with High-Speed Rail if they certified.

Ms. Lee stated there was no conflict. The certification helps them reach an administrative milestone. This allows them to advance a project. The MOU is another topic, which they could address at another meeting.

Council Member Burt noted there were several areas he would like to hear information back on for the next meeting. These included information on the train crossing capacity and quad gate changes. He wanted to hear more about the trains per hour, per crossing and the street clogging traffic concerns. He wanted additional information on the updated areas of the EIR between 2004 and 2008, even though a number of technical alternatives were not researched over electrification as the viable alternative. He also wanted to hear about what Caltrain planned to do if the electrification dollars were not available, and how they would modernize the existing system.

Rita Wespi, Co-Founder of Citizens for Responsible Rail Design (CARRD) discussed the location of the Mountain View substation, which was directly across from Green Meadows. She asked how this was integrated with the High-Speed Rail system. She stated this area has narrow right-of-ways and she is worried about the fit for the neighborhood. She addressed the same concerns about the visual impacts about the poles and overheads.

Paul Jones cautioned everyone on their comparisons. He stated both forms of trains, diesel and electric, were very different. He stated it was very important to compare the modern trains with other modern trains of the same weights to prevent dangerous bias.

Mr. Conlin stated he hoped the quad gates get the proper attention. He addressed concerns over the grade separations as well. He stated the benefits of the gates was great and noted two intersections where they have already had fatalities. He asked whether sensing devices on the tracks can also notify a train well ahead of a crossing if there is a train on the tracks, even with the gates are down.

3. Reports on Meetings

Caltrain, including April 21, 2011 Peninsula Corridor Joint Powers Board (PCJPB)

Rob Braulik spoke regarding the board's meeting. They secured interim funding for existing service with fare box increases. Parking charges were also increased effective in July. The fiscal crisis facing Caltrain still exists and these solutions only addressed the immediate crisis.

Council Member Shepherd asked if they could review the questions with the Chair to see if anything was pertinent for comment.

Council Member Klein stated the Staff report was excellent, and they should see how that is received.

Council Member Burt noted two other items they should raise: 1) Questions about the secrecy of the independent peer review committee on ridership reporting only to Mr. Van Ark. 2) The letter sent months ago regarding Capital costs.

Council Member Shepherd stated they should make a position statement as well about the secrecy over the ridership report.

Council Member Price asked if there were other letters or issues out there that also required responses.

Council Member Burt stated Mr. Van Ark had made offers to meet with Peninsula Cities, but this never reached fruition. He stated there was unwillingness for his meeting with public agencies in a public forum.

Mr. Braulik stated they were planning to circulate the draft EIR for the fall of 2012. They were looking at a phased implementation of nine peak hour trains, with six Caltrain and three HSR trains at peak hours. They were also working on plans for the future Peninsula Rail Programs and a covered trench review, and set a meeting with Staff to discuss this.

Council Member Burt said the Peninsula Cities Consortium (PCC) was in early April and the next one was May 5, 2011.

Council Member Klein gave information on the San Mateo Rail Partnership Meeting with CHSRA CEO Roelof Van Ark, which was held April 20, 2011. He spoke on the Silicon Valley Leadership Group Palo Alto Caltrain Town Hall Held April 26, 2011, and noted numbers were down on these meetings.

4. Future Meetings and Agendas

ADJOURNMENT: Meeting adjourned at 10:09 p.m.