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November 11, 2011

5  
6 Chris Cannon, Director of Environmental Management  
7 Port of Los Angeles  
8 425 South Palos Verdes Street  
9 San Pedro, CA 90731

10 RE: Southern California International Gateway (SCIG) Project  
11 Draft Environmental Impact Report (DEIR)

12 Dear Sir:

13 During the November 10, 2011 SCIG Public Hearing on the above project DEIR, several  
14 "issues" were raised concerning health risks and so called "zero emissions technology".

15 I respect neighbors who oppose the project because they do not want change in the  
16 neighborhood we live in. They have that right, whether I agree with them or not.

17 The positions I oppose are those that through honest misunderstanding; failure to read the  
18 executive summary of the DEIR, or deliberate deception, seek to stall or kill this project for  
19 ulterior purposes.

20 Concern was expressed that the project is not using Linear Synchronous Motor (LSM) or Linear  
21 Inductive Motor (LIM) technologies, which were claimed to be cleaner, more efficient, safer  
22 modes than diesel powered locomotives.

23 I spent the rest of the evening on the 10<sup>th</sup>, and the better part of November 11<sup>th</sup> researching  
24 these claims. I studied the General Atomics (in partnership with others) systems; "Zero  
25 Emissions" Electric Container Moving System for the Ports of Long Beach / Los Angeles LSM  
26 Technology Program presentation to the California Energy Commission April 27, 2009 (ITSC;  
27 AECOM, General Atomics, MacQuarie Bank, 2009);and the same firms "Zero Emissions"  
28 Propulsion on Standard Railway / Roadway Infrastructure presentation for GreenTech Forum  
29 August 3-4, 2009 (Pasadena Convention Center seminar).

30

31 I also studied the History of Existing Maglev Systems Encyclopedia II; General Atomics other  
32 website publications, POLA press releases re maglevs 11/28/2006 and 03/22/2007 (Updated

33 economic impact study re POLA/POLB & Alameda Corridor); the General Atomics Low Speed  
34 Urban MagLev Technology Development Program TRB 2003 annual report; ITSC Port  
35 Container Moving System; General Atomics MagneRail™ website pages, General Atomics  
36 website news releases re Maglev from 05/1998 through 12/2007; Article 2011 North American  
37 Maglev Transport Institute [http://namti.org/?page\\_id=9](http://namti.org/?page_id=9) Maglev vs. Train Comparisons which  
38 includes (online) video links of spectacular collisions involving high speed maglev movers.  
39 Lastly, "A Perspective on Maglev Transit and Introduction of the PRT Maglev" by Galen Suppes,  
40 Dept. of Chemical & Petroleum Engineering, University of Kansas

41 Based on the above, the following CRITICAL observations are made:

- 42 • Not one maglev project in operation today includes heavy container transport.
- 43 • Every system in operation today is some form of light rail people mover.
- 44 • ALL cost, environmental impact and efficiency estimations appear to be for personnel  
45 movement systems operating under optimal conditions, or circumstances that have NO  
46 RELEVANCE to container movement costs, environmental impact or practicality.
- 47 • The most 'famous' maglev technology developer in America appears to be General  
48 Atomics. They are studying container movers in San Diego, but have not (reportedly)  
49 gone beyond the prototype experimental single TEU mover. It is not ready for "prime  
50 time" commercial use.
- 51 • General Atomics has envisioned hybrid Maglev/Rail movers that move individual units  
52 one at a time via remote or onboard guidance. This appeared to have the greatest use  
53 potential in the current POLA / POLB environment, but has huge downside risks that I  
54 submit; make it a completely unusable system here.
- 55 • MagLev systems operating over the 4 miles to SCIG would necessarily operate under  
56 the LEAST rather than optimal conditions. It is unlikely they could ever achieve 'lift off'  
57 speed (20 to 50 mph for commuter trains-unknown for heavy transport trains). They  
58 would instead operate under highest drag conditions for the entire route!
- 59 • All environmental analyses for Maglevs are based on optimal condition commuter trains  
60 that are from 30% to 40% LIGHTER than normal light rail commuter trains. Inverse  
61 results exist when weight is increased. The magnitude of negative net results for a  
62 freight train is simply not published online, if it exists at all.
- 63 • We don't even know if the so called Bechtel Formula is applicable where such a  
64 magnitude of difference exists.
- 65 • The 'East Yard Communities for Environmental Justice put out a flyer in late August,  
66 2011 claiming one-million (more) containers will go to the SCIG facility, and one-million  
67 two-hundred thousand more would go to the ICTF facility to its North. I accept that  
68 number.
- 69 • IF the General Atomics 'model' rail-towed street-wheeled container trailer were used,  
70 there would be TWO MILLION TWO HUNDRED THOUSAND more INDIVIDUAL "mini  
71 train" trips to SCIG and ICTF each year. That's 6,027 MORE REMOTE driven trips A  
72 DAY!
- 73 • While the website touts individual trailer components being feasible, it is simply  
74 unrealistic to envision that many unmanned vehicle trips going "through the

75 neighborhoods” every day. On the other hand, the maximum trailer ‘consists’ they report  
76 as being technically possible is twenty per consist.  $6,027 / 20 = 301.35$ . That is still a  
77 HUGE volume of unmanned mini-trains to be passing through ‘our neighborhoods’. All  
78 graphics suggest that trains would NOT be twenty TEUs, but rather blocks of four (1,204  
79 daily trips).

80 I submit that ONE such unmanned trip over the current rail system is too much for safety. The  
81 developer states that only one car can be present on a rail section at any one time, therefore  
82 “collisions are impossible”. This does not square with trains having twenty TEU trailers, unless  
83 they envision not simply modifying track, but replacing it with shorter segments.

84 Refer to pages 3 and 4 of the ‘Zero Emissions ECMS presentation for POLB/POLA. It shows a  
85 four rail-wheeled bogey with trailer hitch. It shows it towing individual container trailers that have  
86 the usual rubber wheels in four clusters of two, or four wheels per axle.

87 I have seen many container trailers that are bent or out of line. It is only the drivers skill that  
88 keeps them in their lane on the roadway. Such trailers towed over rails are likely to run into or  
89 over raiiside obstructions beyond the railroads ability to keep clear (abandoned cars,  
90 refrigerators, junk, etc. Alternatively-trailer brakes can lock or catch fire during remote dragging.

91 Trains have engineers and safety warning horns. Unmanned rail-towed highway trailers are not  
92 so equipped, nor would it be feasible to man them unless the port is going to mandate hiring  
93 three hundred to twelve hundred new mini-train operators each day.

94 In fairness, the General Atomics design by inference clearly envisions an above grade-crossing  
95 system.

96 It is not feasible or practical to build such a system to reach Terminal Island wharfs all the way  
97 to and from the SCIG (and ICTF)

- 98 1. The Heim lift bridge adjacent rail line could not handle 300 to 1200 individual mini train  
99 trips a day.
- 100 2. Even if a bridge could handle that many trips, navigation would be impeded due to  
101 inability to lift the bridges (trains cannot handle too steep a grade, so the rail level tends  
102 to be near the water surface).
- 103 3. Building new bridges would require even more condemnation of leased property within  
104 the Port and into nearby Wilmington and Long Beach.
- 105 4. Increasing the number of new Maglev lines increases danger from unmanned vehicles.
- 106 5. The “proposed” Maglev lines would require complete replacement of all existing rail lines  
107 with embedded maglev lines. It is not feasible to shut the Port down for the several  
108 years building the in-ground LSM power lines would take, even if the new right of ways  
109 were available.
- 110 6. Net environmental or cost benefits when the huge amount of per trip energy generation  
111 requirements are considered, do not seem probable. I am also considering the  
112 generation costs in terms of money and pollution for the electricity. We are not talking

- 113 about 110v or 220 volt systems. We are talking about 395Kvh systems PER TRAIN!  
114 Even with probable cycling, the amount of energy required is huge.
- 115 7. MagLev cost savings are promoted based on efficiencies and scales that are not  
116 applicable to heavy container freight hauling. The data cited in lines 24 to 40 also  
117 included REAL data on why the first MagLev line ever built was abandoned only fifteen  
118 years after it was built due to higher than expected wear and maintenance costs.
  - 119 8. Of the 20 +/- Maglev or HSR lines built, 10% have had catastrophic accidents.  
120 Catastrophic in this sense is where death occurred, though others had accidents with  
121 property and serious infrastructure damage took place.
  - 122 9. The ONLY safe method of commuter Maglev is with above grade crossings and lines. It  
123 is unknown if this would be adequate for heavy freight since the speeds and physics are  
124 so different than light rail passenger lines.
  - 125 10. The Los Angeles Metro Line routinely kills several people each year. Let's not increase  
126 that annual death toll using far heavier freight carrying hybrid technology that is untried,  
127 and still in the very early commercial use experimental stages.
  - 128 11. Eventually the technology will be state of the art – but it has not reached that yet.
  - 129 12. It took forty years (1912) to 1960 for LSM technology to evolve to patentable meaningful  
130 uses. The first passenger Maglev was not built until 1989, and is no longer in operation.  
131 The system could be well suited to replace short distance (500 or 600 mile) air travel,  
132 and maybe even cross country travel, but it is not yet suitable for heavy freight  
133 movement. We cannot delay the SCIG for another twenty years waiting on Maglev /  
134 LSM/LIM.

135 My other issue or concern is the apparent desire on the part of certain “environmental  
136 advocates” to kill, or delay this project as long as possible, based on health based scare  
137 tactics, and outright racism. I chose to live where I live. It IS an ethnically and culturally  
138 diverse community that I dearly love. That does not mean that either I or my neighbors are  
139 too ignorant to speak for ourselves, or that we need some ambulance chasing  
140 “environmental justice” attorney claiming the project should be stopped for no other reason  
141 than we are collectively “people of color”. Whether we oppose or support SCIG, I don't  
142 believe there is one among us that seriously believes this project location selection was, or  
143 is, race based. It is an industrial use project located in an appropriately zoned industrial use  
144 area. It conforms to zoning, specific plan and Tideland's Grant Act mandates.

145 When the POLA and BNSF originally conceived this project, it was ten years ago. It has  
146 taken this long to reach the present Draft EIR stage of the process, and IF everything goes  
147 well, it would be another 3 years before SCIG could operate.

148 BNSF followed the rules and guidelines in place when they applied for this project. All plans  
149 have a certain amount of flexibility, and it is clear that BNSF modified their plans to  
150 incorporate state of the art, PROVEN technology with strong attention to environmental and  
151 health concerns. They have also agreed to sequential upgrades of equipment according to  
152 a documented schedule, and in accordance with, or better than reasonably foreseeable  
153 standards and technologies. As one resident suggested at the Silverado Park public  
154 hearing, they have already offered to build a sound attenuation / mitigation wall between the

155 project and the West Side residents. The sticking point is the City of Long Beach itself,  
156 refusing (so far) to make the land for such a wall available.

157 I have to wonder why MY city is refusing to cooperate with a reasonable request from  
158 residents in the affected area for a sound wall. With or without the project, such a wall along  
159 the TI Freeway makes sense. Long Beach now has the chance to have the wall built at  
160 someone else's (BNSF) expense.

161 There was also a cynical and emotional exhortation by a self-identified Cabrillo High School  
162 teacher to the effect that the DEIR could not be trusted because it is prepared by or at the  
163 behest of BNSF. I need to know if this teacher is (1) a resident, (2) speaking on behalf of  
164 Cabrillo High School & LBUSD, and (3) If he is simply an environmental 'conscientious  
165 objector" that opposes industrial progress in general.

166 I respectfully remind the POLA and POLB that Cabrillo High and Admiral Kidd Park were  
167 built long after the industrial uses that are on the SCIG site now. Use that is similar in  
168 nature and character to that being proposed.

169 Lastly, Cal-Cartage and the Grain Shipping firm currently on the site are afraid of losing their  
170 businesses and the many hundreds of jobs they support. My reading of the DEIR indicates  
171 relocation is intended for Cal-Cartage at the South end of the site. Other sources tell me  
172 that location is far smaller , and inadequate compared with what they have now.

173 I don't know what leases are in effect, but surely there is a moral obligation to assist them  
174 both in finding new sites for their businesses within or very near to the harbor. POLA  
175 routinely helps tenants to relocate within the Harbor area. Please make a sincere effort to  
176 do the same for those two firms. Growth and progress should not be so mercenary that you  
177 forget or ignore the needs of your loyal, long term tenants too.

178 Please adopt the DEIR without further delay.

179 Respectfully submitted,

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181 Michael F. Ford,

182 Resident, West Long Beach

183 Refs: <http://itsco.us/portbenefits.asp> ;

184 <http://innovativetransportationsystems.com/lmexample.asp> ;

185 [http://en.wikipedia.org/wiki/Maglev\\_train](http://en.wikipedia.org/wiki/Maglev_train);

186 [http://www.ccdott.org/transfer/projresults/2005/task%201.26/task%201.26\\_18.pdf](http://www.ccdott.org/transfer/projresults/2005/task%201.26/task%201.26_18.pdf)

187 <http://www.21stcenturysciencetech.com/articles/Summer03/maglev2.html>

188 <http://www.askmar.com/Inductrack/2007%20Maglev%20Freight%20Conveyor%20Systems.pdf>

189

190 <http://atg.ga.com/EM/transportation/magnetruck/index.php>

191 <http://www.threesquaresinc.com/gtt/wp-content/uploads/2009/04/sandorshapery.pdf>

192

193 <http://www.monorails.org/pdfs/General%20Atomics%202003.pdf>

194 [http://namti.org/?page\\_id=9](http://namti.org/?page_id=9)

195 [http://www.experiencefestival.com/a/Maglev\\_Train\\_-\\_Existing\\_Maglev\\_Systems/id/1739694](http://www.experiencefestival.com/a/Maglev_Train_-_Existing_Maglev_Systems/id/1739694)

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197 [http://www.energy.ca.gov/proceedings/2008-ALT-1/documents/2009-04-27\\_workshop/presentations/17\\_Zero\\_Emissions\\_Electric\\_Container\\_Moving\\_System.pdf](http://www.energy.ca.gov/proceedings/2008-ALT-1/documents/2009-04-27_workshop/presentations/17_Zero_Emissions_Electric_Container_Moving_System.pdf)

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200 <http://faculty.washington.edu/jbs/itrans/suppes.htm>

201 <http://www.pdfgeni.com/book/motor-rail-pdf.html>

202 [http://atg.ga.com/EM/transportation/news\\_articles/Updated%20Economic%20Impact%20Study%20Shows%20That%20Ports%20of%20Los%20Angeles.pdf](http://atg.ga.com/EM/transportation/news_articles/Updated%20Economic%20Impact%20Study%20Shows%20That%20Ports%20of%20Los%20Angeles.pdf)

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204 Info: "Maglev was invented in 1912 by a New Yorker. In 1964 Powell and Danby  
205 of Brookhaven National Labs on Long Island, NY invented a practical form of  
206 repulsion maglev utilizing superconducting magnets, the technique later adopted  
207 by the Japanese. The U.S. government sponsored maglev research in the early  
208 70s ,....."

209 The formula at : <http://faculty.washington.edu/jbs/itrans/suppes.htm> (line 200  
210 above) has an error in the stated formula under Magnetic Drag. The stated  
211 formula says that "S" = conductivity of the track, the example indicates that it is  
212 "K" that is conductivity of the track. It appears to be a typographical error only  
213 however anyone relying on this formula to calculate magnetic drag with various  
214 loads, speeds or differences in systems should verify the formula themselves.