

## Comment Set 14

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of for a Certificate of Public  
Convenience and Necessity for Pacific Gas and  
Electric Company's Jefferson-Martin 230 kV  
Transmission Project

Applications No.  
A-02-09-043

ADDITIONAL WRITTEN COMMENTS ON JEFFERSON-MARTIN 230 kV  
TRANSMISSION PROJECT and DRAFT ENVIRONMENTAL IMPACT REPORT

Dr. Cheol Hoon Lee  
1435 Lakeview Drive  
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## Comment Set 14, cont.

To: Presiding Judge,  
Billie C. Blanchard

Date: August 12, 2003

My family and I would like to submit this letter to refocus attention on the critical, vital health issues / hazards that are raised by the Jefferson-Martin 230 kV Transmission Project (Project). Our family has reviewed a plethora of CPUC, PG&E and Aspen Environmental Group reports, filings and documents from the very first day PG&E submitted its request to build the Project. However, to state respectfully, these issues have not been addressed thoroughly. On the other end of the spectrum, we have also reviewed just a few protest letters from individuals and communities. Along with many of the traditional comments, health and safety of the residents / public through exposure to byproducts of the Project were forefront and paramount. Frankly speaking, we fear that individuals or agencies can sometimes forget the most basics of rules – through all the paperwork, years of discussions, rational arguments made, we are all ultimately here to protect one another. If commerce, business and costs are inadvertently placed at the forefront, such items ultimately exist to serve the welfare and health concerns of the public. We would please like to request the Presiding Judge and CPUC's particular sympathy and attention to this matter.

On October 29, 2002, my family and I submitted a formal Protest letter to the Project (a full copy of this Protest letter included). For the purpose of addressing this major concern, we would like to emphasize the following point:

1. Though the health effects of EMFs are continuously being evaluated, scientists have clearly stipulated that EMFs cause physical changes in cells' reproduction, rhythms, communication, and growth. This is an excerpt taken directly from PG&E's own literature. Also, as the California Department of Health Services and the California EMF Program themselves published, "EMFs can affect biological processes if the intensity is strong enough." We remind the CPUC that our home as well as many other homes are just a few dozen feet away from PG&E's proposed path. Specifically, our home is less than 30 feet from the Tower. According to the *Evaluation of the Possible Risks from Electric and Magnetic Fields (EMFs) from Power Lines, Internal Wiring, Electrical Occupations, and Appliances, Final Report, June 2002*, published by the California EMF Program, we are in an exposure category that is significantly higher than even the highest categories in which studies have been performed.
2. An extensive study conducted by the California Department of Health Services, on behalf of the CPUC, recently reported "degrees of CERTAINTY for policy analysis that EMFs increase disease risk to some extent." Degrees of certainty for increased disease risk were as high as 94% in such categories as childhood leukemia, and above 50% in each of such categories as adult leukemia, adult brain cancer, miscarriage, and Lou Gehrig's Disease. What additional information will be uncovered five or ten years from now, and what real costs are we in fact saving now if the entire Project needs to be moved later.
3. The 230 kilovolt Line and Tower PG&E will erect in our garden will generate, at the Line source, 1,917 times the electric field of a regular home electric socket. The 230 kilovolt Line from the Tower will generate, at the source, 7,255 times the magnetic field of a small fluorescent bulb; 15,960 times the magnetic field of an electric shaver; 95,000 times the magnetic field of a digital cell phone; and 1,064 and 5,700 times the magnetic field of a computer monitor in the on and standby modes, respectively. These magnetic figures are derived from projections, prepared by PG&E, of the amps the 230 kilovolt Line will carry in 2006, but only in normal summer peak load conditions. Notably, this does not represent the maximum amps the 230 kilovolt Line could carry at any one point or that it could consistently carry all the time. The maximum usage could be considerably higher and the amps carried through the Line would be equivalently higher, further increasing the magnetic fields stipulated above. Also, these magnetic figures are based on what

14-1

14-2

## Comment Set 14, cont.

PG&E currently believes will be the thickness of the actual wiring in the Line. If the thickness is increased, though the size of the wires cannot be infinitely increased due to physical and heating limitations, the maximum potential amps that can be carried in this Line and the currents that are created will be even that much larger, increasing proportionately the magnetic field that is generated. According to PG&E, the Tower could even hold two Lines. The above electric and magnetic statistics and exposure at the source would double and increase accordingly. The above figures do not include implementation of methods such as compact delta configuration (arranging of wires in a configuration that will cancel magnetic fields) as such methods can only be accomplished underground.

14-2

4. As reported in by the California Department of Health Services and the Public Health Institute California Electric and Magnetic Fields Program in their *Short Factsheet on EMF*, Magnetic fields are down to “background levels” (naturally occurring amounts) at three or four feet away from an appliance, but magnetic fields reach background levels 300 to 1000 feet from a transmission line. To reemphasize, we are 30 feet from the Tower. As stated in the same report, though electric and magnetic fields dissipate with distance, the strength of both electric and magnetic fields decrease more quickly with distance from “point” sources like appliances than from “line” sources such as powerlines. Also, as similarly reported, magnetic fields pass through most materials, and safeguards such as barriers generally do not provide protection against magnetic fields.

14-3

5. According to the DHS research, magnetic exposure greater than 2 milliGauss is often considered a high exposure category. Most studies have been conducted around such 2 milliGauss exposure levels as the public as a whole may be more commonly exposed to such background levels. In an unidentifiable amount of these studies, even at this level, higher cancer risks were found within the exposed group. At our truly unusual proximity to the Tower, we face a rather unique situation and are in a significantly higher risk category.

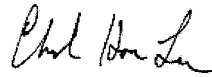
14-4

6. With potential exposure levels considerably higher than high risk levels, the potential health risks for us are radically heightened. The Tower PG&E proposes to place in our very garden will always be “on” and could continually produce thousands of times both the electric and magnetic fields one can or should reasonably be exposed to.

7. Upon receipt of the Notice of Application, we briefly excavated the areas between the general route the Project will take place and our residence(s). A vast amount of open space exists in this area.

14-5

8. This is a place of home, just as yours, for a family, where our children and even grandchildren, visit, sleep, live and spend an immense amount of time.



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Dr. Cheol Hoon Lee

## Comment Set 14, cont.

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of for a Certificate of Public  
Convenience and Necessity for Pacific Gas and  
Electric Company's Jefferson-Martin 230 kV  
Transmission Project

Applications No.  
A-02-09-043

PROTEST and REQUEST FOR HEARING

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## Comment Set 14, cont.

1. Cheol Hoon Lee (a “private citizen”), residing at 1435 Lakeview Drive, Hillsborough, California 94010, (650) 579-7116, hereby submits this Protest objecting to the granting of authority to replace an existing 60 kilovolts Tower located at 1435 Lakeview Drive, Hillsborough, California 94010 with a significantly more powerful 230 kilovolts Tower, as part of the Overhead Line Reconstruction Portion of Pacific Gas and Electric Company’s (“PG&E”) Jefferson-Martin 230 Kilovolt Transmission Project.
2. The replacement of the existing 60 kilovolt Transmission Line with a 230 kilovolt Transmission Line (coined by PG&E as the Overhead Rebuild Portion), through portions of Hillsborough, CA, may also be included into this Protest, or this Protest may become part of a larger Protest that residents in Hillsborough enact. Cheol Hoon Lee has recently learned that several residents in Hillsborough are reviewing PG&E’s Application for the Jefferson-Martin 230 kV Transmission Project, and they too have expressed some concern.
3. PG&E filed the Application with the Commission seeking Certificate of Public Convenience and Necessity to construct a new and approximately 27-mile long 230 kilovolt electric Transmission Line with Overhead and Underground Portions, generally extending from the Jefferson Substation located in San Mateo County to the Martin Substation located in Brisbane. According to PG&E’s Application, the Overhead Rebuild Portion of the Project is approximately 14.7 miles long. It “extends through and existing utility corridor in the San Francisco Public Utilities Commission watershed lands to a transition station to be constructed near the intersection of San Bruno Avenue and Glenview Drive, just east of Skyline Boulevard, in San Bruno.” The work on the Overhead portion of the Project will replace the existing 60 kilovolt electric Transmission Line with a significantly stronger 230 kilovolt electric Transmission Line. With few exceptions, the new Transmission Line Towers and Poles will replace the existing Towers and Poles at or near their current locations.
4. One of the 230 kilovolt Towers that will be implemented in this Program is not remote to but in the very garden of the residence at 1435 Lakeview Drive. The Tower is located less than 30 feet from the master bedroom of the residence.

### Health Hazards:

5. Though the health effects of EMFs are continuously being evaluated, scientists have clearly stipulated that EMFs cause physical changes in cells’ reproduction, rhythms, communication, and growth<sup>(a)</sup>. EMFs can affect biological processes if the intensity is strong enough (b). Considering our home is less than 30 feet from the Tower, we are in an exposure category that is significantly higher than even the highest categories in which studies have been performed.
6. A surplus and increasing number of studies have reported increased rates of cancers and other illnesses due to even every day levels of exposure to electric and magnetic fields. An extensive study conducted by the California Department of Health Services (“DHS”), on behalf of the California Public Utilities Commission (“CPUC”), recently reported “degrees of certainty for policy analysis that EMFs increase disease risk to some extent.” Degrees of certainty for increased disease risk were as high as 94% in such categories as childhood leukemia, and above 50% in each of such categories as adult leukemia, adult brain cancer, miscarriage, and Lou Gehrig’s Disease. This means, to one degree or another, the scientists in this study “leaned towards the belief that EMFs can cause some amount of increased risk” in several disease categories. These scientists all published original research and had extensive and impressive backgrounds in the EMF area. Prior to considering the specific evidence about EMFs, the scientists had started with a low degree of confidence that every day exposures to EMFs would cause disease. After reviewing the EMF evidence this degree of confidence notably increased.
7. The National Institutes of Environmental Health (“NIEHS”), the International Agency for Research on Cancer (“IARC”), and the British National Radiation Protection Board (“NRPB”), individually, all assessed EMFs as a possible carcinogen for childhood leukemia also<sup>(c)</sup>. NIEHS additionally assessed EMFs as a possible carcinogen for adult lymphoid leukemia and the NRPB assessed a possible link with Lou Gehrig’s Disease<sup>(c)</sup>.

## Comment Set 14, cont.

8. Most epidemiology studies have stipulated that there is an association between such diseases as leukemia and magnetic field exposure<sup>(d)</sup>. Epidemiology studies provided enough evidence to classify EMFs as a “possible human carcinogen,” which means that researchers believe that it is possible that EMFs cause cancer. Epidemiology studies show an increased risk, 1.5 to 4 times higher, of certain types of cancers from EMFs<sup>(a)</sup>.
9. Cancer is a term used to describe at least 200 different diseases, all of which involve uncontrolled cell growth<sup>(e)</sup>. The incidence of cancer in adults in the United States is 382 per 100,000 per year. The causes of most of these cases are not fully known either, yet avoidance of plausible contributors such as smoking and alcohol is avidly advocated<sup>(e)</sup>. Leukemia is the most common form of cancer found in children<sup>(e)</sup>. In the United States, the incidence of adult leukemia is about 10 cases per 100,000 people per year<sup>(e)</sup>.
10. Such concerns are only the proverbial scratch on the surface. To recapitulate all the scientific and civic arguments is beyond the intended design or scope of this Protest letter. The concern is not imaginary. No one disagrees there are some real risks with EMF exposure.

Threat:

11. The 230 kilovolt Line and Tower PG&E will erect in our garden will generate, at the Line source, 1,917 times the electric field of a regular home electric socket. The 230 kilovolt Line from the Tower will generate, at the source, 7,255 times the magnetic field of a small fluorescent bulb; 15,960 times the magnetic field of an electric shaver; 95,000 times the magnetic field of a digital cell phone; and 1,064 and 5,700 times the magnetic field of a computer monitor in the on and standby modes, respectively. These magnetic figures are derived from projections, prepared by PG&E, of the amps the 230 kilovolt Line will carry in 2006, but only in normal summer peak load conditions. Notably, this does not represent the maximum amps the 230 kilovolt Line could carry at any one point or that it could consistently carry all the time. The maximum usage could be considerably higher and the amps carried through the Line would be equivalently higher, further increasing the magnetic fields stipulated above. Also, these magnetic figures are based on what PG&E currently believes will be the thickness of the actual wiring in the Line. If the thickness is increased, though the size of the wires cannot be infinitely increased due to physical and heating limitations, the maximum potential amps that can be carried in this Line and the currents that are created will be even that much larger, increasing proportionately the magnetic field that is generated. According to PG&E, the Tower could even hold two Lines. The above electric and magnetic statistics and exposure at the source would double and increase accordingly. The above figures do not include implementation of methods such as compact delta configuration (arranging of wires in a configuration that will cancel magnetic fields) as such methods can only be accomplished underground.
12. As stipulated earlier, the Tower is located less than 30 feet from our home and master bedroom. Magnetic fields are down to “background levels” (naturally occurring amounts) at three or four feet away from an appliance, but magnetic fields reach background levels 300 to 1000 feet from a transmission line<sup>(d)</sup>. Though electric and magnetic fields dissipate with distance, the strength of both electric and magnetic fields decrease more quickly with distance from “point” sources like appliances than from “line” sources such as powerlines<sup>(d)</sup>. Also, as most of us know, magnetic fields pass through most materials, and safeguards such as barriers generally do not provide protection against magnetic fields<sup>(d)(e)</sup>.
13. According to the DHS research, magnetic exposure greater than 2 milliGauss is often considered a high exposure category. Most studies have been conducted around such 2 milliGauss exposure levels as the public as a whole may be more commonly exposed to such background levels. In an unidentifiable amount of these studies, even at this level, higher cancer risks were found within the exposed group. At our truly unusual proximity to the Tower, we face a rather unique situation and are in a significantly higher risk category. With potential exposure levels considerably higher than high risk levels, the potential health risks for us are radically heightened. The Tower PG&E proposes to

## Comment Set 14, cont.

place in our very garden will always be “on” and could continually produce thousands of times both the electric and magnetic fields one can or should reasonably be exposed to.

14. Though magnetic fields are clearly a primary concern, electric fields and other less researched properties such as resonance frequency should not so easily be discounted here, particularly since the source of EMFs is not just a small household item but a Transmission Line and Tower that will continuously emit hundreds and thousands of times both electric and magnetic fields. Such items can often tend to be discounted not because real concerns do not exist with them, but because the potential exposure to electric fields and such items may be lower since they are easily weakened by objects, the scientific community tends to perform more research where initial evidence is greatest, etc. We must be cognizant of what the source of the voltage and currents will be, and the proximity to our home.

### Discussion:

15. PG&E and various studies may assert that interpreting measurements, setting guidelines for exposure levels to EMFs, and the effects of EMFs on health are difficult to determine. Exposure to radiation or smoking and their links to various diseases, as just a few examples, are difficult to ascertain as well, but the lack of or abundance of indisputable evidence in these situations has not in itself determined policy. Deliberate exposure to any potential hazard, particularly when faced with staggering amounts of data indicating that EMFs do increase the risk of certain diseases, is imprudent and illogical.
16. Some argue action is not justified since EMFs significantly increase risk of only select diseases. Such logic may follow, then, that the consumption of any number of items, every day, such as large quantities of lard, is acceptable because it only causes one or two diseases. One would never recommend this. Also, by no means would the government, an agency, or much less I force anyone to do such a thing. Scientists, often in accord, for years, have been saying EMFs “increase the risk of certain diseases like childhood leukemia” and other diseases as those stated above. As previously mentioned, childhood leukemia is the number one cancer found in children <sup>(e)</sup>.
17. Scientists, in fact, argue the risks associated with EMF exposure may not be so unimportant. Two recent studies calculated the proportion of all childhood leukemia cases that might be attributed to the rare highest residential EMF exposures. This was estimated to be around 3%. With about 100 childhood leukemia deaths per year, this would translate to about three deaths in California per year attributable to EMFs. The evidence does not permit similar direct calculations for the other conditions reviewed above. However, suppose that even only a much more diminutive 1% of the conditions were considered in this evaluation, minus those diseases that were not “strongly believed” by the scientists in the recent DHS study to be attributable to EMF exposure. In such a situation, the DHS study stated that “the number of attributable cases could still be in the hundreds per year and comparable to the theoretical burden of ill health that has motivated other environmental regulation.” The DHS study, conducted by the DHS and the CPUC, is titled “Evaluation of the Possible Risks from Electric and Magnetic Fields (EMFs) from Power Lines, Internal Wiring, Electrical Occupations, and Appliances, Final Report.”
18. Even from an “economist” or “cost basis” perspective, moving the Tower is prudent. The DHS study states that the measures for retrofit lowering of fields that are sometimes possible on the different voltage transmission lines (reverse phasing, optimum phasing, and split phasing) are “inexpensive,” averaging out to about \$80,000 a mile, though underground methods such as compact delta configuration are costlier. The DHS study stated that even if only a few percent of even only the background California deaths, from conditions that received some degree of credibility from the DHS scientists, were to occur (3,465 childhood leukemia deaths / 35 years; 45,290 adult brain cancer background deaths / 35 years; 15,190 Lou Gehrig’s disease background deaths / 35 years), this could exceed the 98 deaths over 35 years needed to make modest changes to the power grid cost beneficial over a 35 year period.
19. Individuals sometimes state that “every day activities” are statistically more hazardous to people than the risks associated with EMF exposure. Such a statement, however, hardly presumes exposure to

## Comment Set 14, cont.

EMFs is resultingly tolerable. We don't state or believe consuming benzene or using lead paint and potentially becoming very sick from them are any less important just because millions of more people are killed or injured each year in arguably more dangerous things like driving accidents.

20. Agencies, such as The Food & Drug Administration and the Federal Air and Aviation, do not approve the administration of an item until all risks are understood and the item reasonably cleared of potential dangers. Such a policy seems to be enacted selectively. A few arguments, from "non-interference" to "virtual certainty required", have somehow made their way into the entire EMF landscape, arguably only from an academic perspective though. If PG&E were allowed to erect such a powerful Tower in our garden, we would be protected under considerably weaker rights, even though an abundance of evidence clearly stipulate the risks of exposure to EMFs with a number of specific diseases, and such stories only seem to grow and prevail. New data warning of EMF exposure seems to be uncovered all the time. What issues have not yet even been considered?
21. Given though, what and how much we already know about EMFs, when have costs become too high or much less made into an issue, or when did we start to ask what the dollar value is of a statistical life, particularly considering the unusual proximity of the Line to our home that classifies us beyond even the "high" exposure category? When is this issue a "trade-off"?
22. Clearly policy and the matters that affect policy must be weighed with public benefit. A complete overhaul of policy is not the only option though, as the Tower is located so unusually close to the residence. We are in a situation that is more unique than those generally classified as even "high" risk categories. Abundant space exists between us and the normal path that the Transmission Line traverses.

### Considerations and Options:

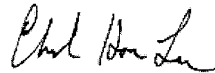
23. As stated above, PG&E states that the Overhead Transmission Line "extends through and existing utility corridor in the San Francisco Public Utilities Commission watershed lands." However, the Overhead Rebuild Portion of the Project extends through not only watershed lands but through residences in Hillsborough. PG&E may not be fully aware of this as the map provided by PG&E in its Notice of Application depicts the entire length of the Transmission Line generally traversing a straight line, but, in the general vicinity of Hillsborough, "curving or jogging" into dense areas of residences.
24. Upon receipt of the Notice of Application, we briefly excavated the areas between the general route the Project will take place and our residence(s). A vast amount of open space exists in this area. We initially, understandably believed the Tower may be erected and reconstructed somewhere in this area, further away from our home, and we were optimistic.
25. PG&E has many other viable options. We strongly believe, as nothing seems to indicate otherwise, that no more or less wildlife or ecology exists around these other areas than around our home, and that another Tower can as easily be erected in this other area. A Tower further away from our home, perhaps along the highway, would still enable PG&E and agencies to maintain the exact ecology standards as originally designed while removing EMF dangers or exposure from our home and residences in the area.
26. On October 25, 2002, we spoke with Bob Donovan at PG&E and asked him why PG&E initially might have placed the Towers in such a location, to investigate if there was a real reason the Tower could have only been placed in its current location, or if the current location was one of several places that could hold a line and the current location was the one that was simply chosen. On October 28, 2002, he responded that he spoke with PG&E's land and routing department and researched the history of the Tower and could not find any real data indicating why PG&E chose to place the Tower in its current location or evidence in any way suggesting other areas were not feasible. He cited only possibly a legal easement, though he agrees an easement by no means is authorization for a party to do with it anything it pleases.



## Comment Set 14, cont.

27. We do not so much question the need for California to have more capacity in generation and transmission of electricity. However, given all the items that have been mentioned, only an increasing number of major studies purporting more evidence, the rather unreasonable proximity (less than 30 feet) of the Tower and Lines to our home, and the viable options that seem to exist, there really is little reason why the Project could not so much be halted but the Tower in our garden moved further away from our home to a reasonable distance, fairly appeasing all sides.
28. This is a place of home, for a family, where our children and even grandchildren visit and spend an immense amount of time.
29. We would like the CPUC, please, to consider seriously the situation at hand and to administer a process by which PG&E reconsiders viable options to place the 230 kV Tower in a safer area.
30. Though this may not be material, the Project generally will not serve the residents in Hillsborough. It will serve only those residents to the west of the Line.
31. Pursuant to the Commission Rules of Practice and Procedure, Rule 44.2, this private citizen hereby requests an evidentiary hearing to support my request for denial of the granting of authority to erect a 230 kilovolts Tower in our garden, as part of the Overhead Line Reconstruction Portion of Pacific Gas and Electric Company's Jefferson-Martin 230 Kilovolt Transmission Project.
32. Applicant PG&E, c/o Latham & Watkins, representatives of PG&E, as shown on the attached certification, has been furnished with a copy of this Protest by mailing a properly addressed copy by first class mail with postage.
33. The private citizen will furnish a copy of this Protest to any interested party upon written request.

Dated: October 29, 2002



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Dr. Cheol Hoon Lee  
1435 Lakeview Drive  
Hillsborough, CA 94010  
Telephone: (650) 579-7116  
Facsimile: (650) 579-7106

## Comment Set 14, cont.

Footnotes:

(a) Source: PG&E EMF Literature, Pacific Gas & Electric.

(b) Source: "An Evaluation of the Possible Risks from Electric and Magnetic Fields (EMFs) from Power Lines, Internal Wiring, Electrical Occupations, and Appliances, Final Report," June 2002, California EMF Program.

(c) Source: "Policy Options in the Face of Possible Risk from Power Frequency Electric and Magnetic Fields (EMF), Final Report," June 2002, California EMF Program.

(d) Source: "Short Factsheet on EMF," California Electric and Magnetic Fields Program, California Department of Health Services and the Public Health Institute.

(e) Source: "Questions and Answers - EMF in the Workplace," National Institute for Occupational Safety and Health, National Institute of Environment Health Sciences, and U.S. Department of Energy.

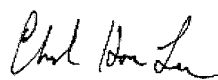
## Comment Set 14, cont.

### VERIFICATION

I am Cheol Hoon Lee, the complainant in the above entitled matter. The statements in the foregoing document are true to my knowledge, except as to matters which are therein stated on the information and belief, and as to those matters, I believe them to be true.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on October 29, 2002, at Hillsborough, California.



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Dr. Cheol Hoon Lee

## Comment Set 14, cont.

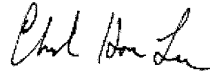
### CERTIFICATION OF SERVICE

I hereby certify that I have, this day, served a copy of Cheol Hoon Lee's Protest to Application A-02-09-043 on Latham & Watkins, representatives of Pacific Gas & Electric, and the Director, Energy Division for California Public Utilities Commission by mailing a properly addressed copy by first class mail with postage prepaid to the following:

Richard W. Raushenbush, Esq.  
Latham & Watkins  
505 Montgomery Street, Suite 1900  
San Francisco, CA 94111

Director, Energy Division  
California Public Utilities Commission  
Energy Division  
505 Van Ness Avenue  
San Francisco, CA 94102

Executed on October 29, 2002 at San Francisco, California.



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Dr. Cheol Hoon Lee

## **Responses to Comment Set 14 – Dr. Cheol Hoon Lee**

- 14-1 Please see the Response to Comments PPH1-45 and PPH1-73 from the testimony of Tony Lee in the Public Participation Hearings' transcript from August 12, 2003.

## Comment Set 15

To: Billie Blanchard, CPUC,  
Presiding Judge,  
Aspen Environmental Group

Re: Major Oversight and Problems with the Draft Environmental Impact Report.

I understand the Partial Underground Alternative places the 60kV and 230kV Lines and Project underground, particularly around towns and cities. This was deemed notably important in towns and cities, places where people reside. Considering the designs of the Alternatives, the advising Consultants, including the Aspen Group, seemed to acknowledge the meaningfulness and legitimacy of the concerns over several dozen environmental, community issues, such as public health and safety, aesthetics, property value, etc., and listened to the thousands of voices regarding particularly public health and safety emanating from citizens of the community. As we also abundantly reheard during the Public Hearing on August 12, 2003, particularly the safety issues surrounding the Towers and Projects are more than real and critical.

However, according to Figure D.3-20a in the Visuals section of the full DEIR, the 60kV Tower, specifically Tower 7 / 39, which is probably located closer to a home than most any other Tower involved in this entire Project, located less than 30 feet from our master bedroom of our residence located at 1435 Lakeview Drive, Hillsborough, is to remain. An individual named Brewster with Aspen has also stated that this Tower may even be made larger. Figure D.3-20a states that the Tower is or will become a Transition Station, potentially making the currently looming menace hanging over our house even more ominous and dangerous and effectively turning our home not into a place where families live and stay but into a PG&E landmass holding a shed.

This raises many serious questions:

- 1) How are the fears and concerns, such as property value, noise, aesthetics and particularly public health and safety, that are voiced by all the community in proximity to the Project acknowledged and designs created to address these concerns, then, suddenly ignored and overlooked when it comes to the security of a select group of individuals or at least one household? How do these concerns suddenly disappear for the CPUC and Aspen when it comes to us? How is this justified?
- 2) Sometimes sacrifices have to be made and some people have to lose, but how do such rules ever make sense when:
  - The issue and Project at hand is potentially life threatening and directly questions public safety? Did no one hear, particularly at the Public Hearing on August 12, 2003, the very real and overwhelming concerns of all the citizens being that of health and safety, our very lives? If we're debating what area pays 1.1% property tax versus another area paying 1.3% or who gets 12 eggs and who gets none, perhaps a balance needs to be struck. When it comes to cancers, health, lives, not everyone must be protected, not everyone has rights to equal protection? Could I place a 60kV and 230kV Line through your very backyard and could anyone honestly say they would be comfortable if not outright outraged?
  - Particularly, there most certainly should be other very viable options available-- there is a great deal of land everywhere, far from our residence and I cannot believe there is not at least one other viable place for the Tower. The preceding was a question. Also, is the Tower even necessary in the area or can it strategically be placed somewhere else? Please think hard about this and I want to be involved in every step of this analysis. I would like clear explanations and ample support and evidence to every answer that is provided as well. Options including passing the wires through the Creek through a shell, or placing a small Tower far away from any residence and using some even further off place for a Transition Tower such South of the Creek and strategically designing the entire Path should be determined. What other options are there? There must be one because having a Transition Station over our home is not really an option one would think.

15-1

## Comment Set 15, cont.

15-1

- 3) What is the CPUC and consultants going to do about all this and investigate?
- 4) Under the Total Underground Alternative as well, what happens to Tower 7 / 39 – what Tower exists or is taken down, how is the Creek still crossed, or are we selectively overlooked and disregarded?
- 5) Under a Partial Underground Alternative, if the 60kV Lines can be touched and affected so as to place both the 60kV and 230kV line all underground, why can't the same 60kV line be touched in a Total Underground Alternative – if red tape, laws, bureaucracies prohibit one from touching the 60kV Line in a Total Underground Alternative, wouldn't one expect we would be limited similarly under a Partial Underground Alternative, but this apparently is not the case. How are these things overlooked or nonmaterial with a Partial Underground Alternative? More importantly, if this can be done is a Partial Underground Alternative situation, can the same rules allowing "exemption" or "variance" not be allowed under a Total Underground Alternative situation as well. Furthermore, we all know the passing of time implies change. It's imperative if not inevitable. What rules or laws need to be updated to correspond with advancements or developments? What do we know now that would mandate and warrant a change in policies? What is the spirit of certain policies, not so much the literal definition and what creative leeway do we have?

On August 13, 2003, shocked and extremely upset upon realization of what Figure D.3-20a was suggesting, I referred Billie Blanchard of the CPUC to the problem and she too was a bit taken aback and stated it did not make sense either. She stated that Figure D.3-20a may contain errors and that the situation and Tower 7 / 39 immediately surrounding our home may not be depicted accurately in Figure D.3-20a. I hope the mistake was only in the illustration. I hope the error was made only on the illustration. On October 29, 2002, I had submitted a formal Protest letter pointing out several times how close we are to a Tower and that a significantly higher voltage Tower would crush our home. I communicated this to Aspen several times during the Scoping Meetings. I did this again at the Informational Meeting July 31, 2003. I, as did an overwhelming number of others, communicated the immense real concerns and fears to our health and lives in the Public Hearing on August 12, 2003. I hope the Visual Team did in fact make a mistake and that we will not have a Tower, which looms closer to a home than probably any other Tower, erected and scaling literally over our walls. Ms. Blanchard stated that she would get back to me to see if all this was in fact errors in the illustration before the formal answering period commences, so that we rightfully know what we're even facing if we are to be able to take correct preemptive action.

If Figure D.3-20a is accurate, however, I cannot imagine how irresponsible one or an agency could have been to even think of keeping or even further building up a Tower that is so dangerously close to a home, even irrespective of the considerations every other resident living in the cities and towns involved in the Project received. Considering dozens of concerns and fears have been recognized and were meaningful and severe enough, and alleviation provided, I cannot even begin to understand how we receive such unfair treatment and are so easily disregarded.

Please provide answers and remedies as soon as possible.

With immense anxiety and sincerity,



Cheol Hoon Lee

1435 Lakeview Drive  
Hillsborough, CA 94010  
(650) 579-7116  
(917) 664-3122



Tony Lee

## **Responses to Comment Set 15 – Cheol Hoon Lee and Tony Lee**

- 15-1 Please see the Response to Comments PPH1-45 from the August 12, 2003 Public Participation Hearing transcript.



## Comment Set 16

### Jefferson-Martin Transmission Project

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**From:** Kathy Battat [kbattat@yahoo.com]  
**Sent:** Monday, August 18, 2003 4:48 PM  
**To:** jeffmartin@aspeneq.com  
**Subject:** For the Record...

Billie Blanchard, California Public Utilities  
Commission  
c/o Aspen Environmental Group  
235 Montgomery Street, Suite 935  
San Francisco, CA 94104

Dear Mr. Blanchard,

I would like to encourage you to vote against the PG&E proposed route 1A planned for the Jefferson-Martin 230kV Transmission Project.

As a resident of the Hillsborough Carolands, I am strongly in favor the Partial Underground route for my neighborhood, which would have the new 230kv lines AND the existing 60kv lines and towers on the WEST side of 280.

My concerns are primarily health related because I have two young boys, although reduced property values are also a large concern. The key negatives with the proposed route 1A are:

- A June 2002 study by the California Department of Health Services (DHS) indicates that DHS scientists are inclined to believe that EMFs are associated with an increased risk of childhood leukemia, adult brain cancer, Lou Gehrig's disease and miscarriage. Only 5% of residences in the U.S. are exposed to the EMF levels that would occur in many houses from this line. It is estimated that children in these homes are twice as likely to develop childhood leukemia as their non-exposed peers. Source: 2003 Electric Power Research Institute (EPRI), Inc. There is lots of other studies and data regarding EMFs and the possible link to cancer and other diseases as well.
- Property values will be negatively impacted, and not just those immediately next to the lines due to the larger, taller overhead towers behind homes.
- Peninsula residents will bear all of the environmental impacts of the new transmission line even though the primary purpose of the project is to provide power to San Francisco.

I hope you will take into consideration our views and those of our neighbors as you decide on the best route for PG&E and the residents.

Sincerely,

Kathy Battat  
524 Craig Road, Hillsborough CA 94010  
(650) 401-6788

P.S. Hard Copy to Follow.

16-1

16-2

16-3

## **Responses to Comment Set 16 – Kathy Battat**

- 16-1 Please see General Response GR-1 regarding EMF.
- 16-2 Please see General Response GR-2 regarding property values.
- 16-3 Please see General Response GR-3 regarding the equity of impacts and benefits of the project.

## Comment Set 17



CALIFORNIA PUBLIC UTILITIES COMMISSION (CPUC)

### Informational Meeting – Comments

Proposed Jefferson-Martin 230 kV Transmission Line Project

Tuesday, July 29, 2003  
Thursday, July 31, 2003

Page 1

Name\*: RON SMALL  
Affiliation (if any)\*: 280 CCC  
Address\*: 1319 SKYVIEW DRIVE  
City, State, Zip Code\*: BURLINGAME, CA 94010  
Telephone Number\*: (650) 344-9152  
Email\*: RONTALKER@AOL.COM

If this project is determined to be necessary, the only viable alternative for Burlingame residents is the partial underground alternative in the southern segment. The P&E plan to build an overhead 230KV transmission line is totally unacceptable as a tower would potentially be within 30 feet of my property. The EMF emissions would thus be at dangerously high levels, the visual impact would be severe, and our property value would be substantially reduced. P&E alternative 1B is also unacceptable because we would be sandwiched between the existing overhead 60KV lines and the new underground 230KV

17-1

17-2

17-3

(continued)

\*Please print. Your name, address, and comments become public information and may be released to interested parties if requested.

Please either deposit this sheet at the sign-in table before you leave today, or fold, stamp, and mail. Insert additional sheets if needed. Comments must be received by August 28, 2003. Comments may also be faxed to the project hotline at (650) 240-1720 or emailed to jeffmartin@aspenerg.com.

## Comment Set 17, cont.



**CALIFORNIA PUBLIC UTILITIES COMMISSION (CPUC)**  
**Informational Meeting – Comments**  
Proposed Jefferson-Martin 230 kV Transmission Line Project

Tuesday, July 29, 2003  
Thursday, July 31, 2003

Page 2

Name\*: \_\_\_\_\_  
Affiliation (if any)\*: \_\_\_\_\_  
Address\*: \_\_\_\_\_  
City, State, Zip Code\*: \_\_\_\_\_  
Telephone Number\*: \_\_\_\_\_  
Email\*: \_\_\_\_\_

lines along Skyline Blvd. This would again expose us to unacceptable high levels of EMF emissions. Another alternative that some have suggested is to underground the 230KV transmission lines along the existing corridor behind Skyview Drive and Alma Vista Drive in Burlingame. This is also unacceptable because the lines could potentially be within 30 feet of my property and the EMF exposure levels would again be dangerously high.

I feel it is imperative that consideration of dangerously high exposure levels from EMF emissions be given top priority in the decision making process regarding this project.

\*Please print. Your name, address, and comments become public information and may be released to interested parties if requested.

Please either deposit this sheet at the sign-in table before you leave today, or fold, stamp, and mail. Insert additional sheets if needed. Comments must be received by August 28, 2003. Comments may also be faxed to the project hotline at (650) 240-1720 or emailed to [jeffmartin@aspenerg.com](mailto:jeffmartin@aspenerg.com).

17-3

## Responses to Comment Set 17 – Ron Small

- 17-1 The commenter's support of the Partial Underground Alternative and opposition to PG&E's Proposed Project are noted.
- 17-2 Please see General Response GR-1 regarding EMF and GR-2 for a response regarding property value effects. EIR Section D.3 presents a detailed analysis of visual impacts of the Proposed Project and alternatives, including identification of significant visual impacts in Burlingame in Section D.3.3 (Impact V-13, Carolands Substation to Transition Station).
- 17-3 The commenter's opposition to PG&E Route Option 1B Alternative is noted. Please see General Response GR-1 regarding EMF and text additions in Section D.8.7.4 of this Final EIR regarding the EMF analysis and the "sandwich" issue in the Burlingame area under PG&E Route Option 1B. With the 230 kV line installed in Cañada Road and Skyline Boulevard, there are essentially no cumulative impacts of the 230 and 60 kV lines because of the distance between the two lines. Please see Response to Comment 40-15 regarding potential cumulative EMF impacts along Skyline Boulevard between Hayne Road and Trousdale Avenue.

## Comment Set 18

### Jefferson-Martin Transmission Project

**From:** DHEffects@aol.com  
**Sent:** Monday, August 18, 2003 11:59 PM  
**To:** jeffmartin@aspeneq.com  
**Subject:** 280 CCC

Billie Blanchard, California Public Utilities Commission  
c/o Aspen Environmental Group  
235 Montgomery Street, Suite 935  
San Francisco, CA 94104

I am a resident of Hillsborough, California. I want to also voice my concerns which are reflectant of my neighbors and friends. I am concerned as I live very close to these proposed power lines and have 3 small children and moved to Hillsborough specifically for my children. Health risks that are possible and avoidable are a major concern of mine. We have put everything we have to buy a small, older home in Hillsborough so that our kids could have a great life with the some of the best schools in the state. Route 1A is not what anyone in Hillsborough wants. Please take this into deep consideration. If you lived here, I know that you would feel the same way and would not subject your children to this potential threat to their lives or anyone's life.

18-1

Here are our main issues of concern to us:

- Larger, taller overhead towers behind homes (with route 1A).
- A June 2002 study by the California Department of Health Services (DHS) indicates that DHS scientists are inclined to believe that EMFs are associated with an increased risk of childhood leukemia, adult brain cancer, Lou Gehrig's disease and miscarriage. Only 5% of residences in the U.S. are exposed to the EMF levels that would occur in many houses from this line. It is estimated that children in these homes are twice as likely to develop childhood leukemia as their non-exposed peers. Source: 2003 Electric Power Research Institute (EPRI), Inc. There are lots of other studies and data regarding EMFs and the possible link to cancer and other diseases as well.
- Property values will be negatively impacted, and not just those immediately next to the lines.
- Peninsula residents will bear all of the environmental impacts of the new transmission line even though the primary purpose of the project is to provide power to San Francisco.
- The potential for some residents (in Burlingame) to have a 230kV line on one side of their house and 60kV lines on the other, if route 1B is chosen.
- We do know that **we absolutely do NOT want route 1A**, which would have the new 230kV line along with the current 60kV lines on new taller and bigger towers in the current right-of-way.

18-2

18-3

18-4

18-5

Thank your for listening,  
Diane Hong  
1575 Tartan Trail Road  
Hillsborough, CA 94010

8/28/03

## Responses to Comment Set 18 – Diane Hong

- 18-1 The commenter's opposition to Route Option 1A is noted. Please see General Response GR-1 regarding EMF.
- 18-2 EIR Section D.3 presents a detailed analysis of visual impacts of the Proposed Project and alternatives, including identification of significant visual impacts in the Hillsborough area in Section D.3.3. Each individual issue area in Section D of the Draft EIR also analyzes the impact of the overhead transmission line in the Southern Segment, incorporating the effect of larger, taller towers.
- 18-3 Please see General Response GR-1 regarding EMF.
- 18-4 Please see General Response GR-2 regarding property values.
- 18-5 Please see General Response GR-3 regarding the equity of impacts and benefits of the project.
- 18-6 Please see General Response GR-1 regarding EMF, and text additions in Section D.8.7.4 of this Final EIR regarding the EMF analysis and the "sandwich" issue in the Burlingame area under PG&E Route Option 1B. With the 230 kV line installed in Cañada Road and Skyline Boulevard, there are essentially no cumulative impacts of the 230 and 60 kV lines. Please see Response to Comment 40-15 regarding potential cumulative EMF impacts along Skyline Boulevard between Hayne Road and Trousdale Avenue. The commenter's opposition to the Proposed Project is noted as well.

## Comment Set 19

### Jefferson-Martin Transmission Project

**From:** Pavis, Barbara [Pavis@corixa.com]  
**Sent:** Monday, August 18, 2003 11:53 AM  
**To:** 'jeffmartin@aspeneg.com'  
**Subject:** FW: PUC to force PG&E to tear up Gateway Blvd.

**Importance:** High



PG&E.pdf

I object to this project running through Gateway Boulevard to Oyster Point Boulevard. There are too many businesses on Gateway Blvd. for this to happen. I would like the original plan adhered to.

19-1

-----Original Message-----

**From:** Trish Denton [mailto:tdenton@bostonproperties.com]  
**Sent:** Friday, August 15, 2003 2:56 PM  
**To:** anelson@britanniagr.com; vhp@everdream.com; cstewart@raiser.com; koconnor@wres.com; ppryor@labspace.com; pdanna@larkspurhotels.com; donna@chamb.com; sharon@chamb.com; michael\_palmer@hilton.com; pavis@corixa.com; csharp@fibrogen.com; tjohnson@elan.com  
**Subject:** PUC to force PG&E to tear up Gateway Blvd.  
**Importance:** High

Dear neighbor and business colleague:

This important message is being sent to you to inform you of a massive transmission line project that PG&E is planning for construction from 2004 to 2006. The project, known as the "Jefferson-Martin 230KV Transmission Project" would stretch 27 miles from Redwood City to Brisbane. PG&E has proposed to the CPUC that the majority of the line run parallel to the BART line. However, the CPUC with jurisdictional rights for where utility lines are located, is endorsing an alternate route that would take the line through the East of 101 Area in South San Francisco. THE NEW UNDERGROUND LINE WOULD BE CONSTRUCTED RIGHT THROUGH GATEWAY BOULEVARD. Specifically, the line will run up Produce Avenue through Gateway Boulevard to Oyster Point Boulevard and then follow the railroad tracks over to Sierra Point (see attached pdf).

The CPUC's endorsement of this alternate route, known as the "Modified Underground Existing 230kv Collocation Alternative and New South San Francisco Segment" is problematic for several reasons:

First and foremost, it appears that stakeholders in the East of 101 Area were not informed in a timely manner or at all. By State law (CEQA), the public must be notified and allowed sufficient time to comment on the project. The Notice of Preparation was issued on January 21, 2003, scoping meetings occurred in January and February, the scoping report was issued on April 4 and the Draft Environmental Impact Report (EIR) was issued on July 16. If you feel as though you were not properly informed of the release of

19-2



## Comment Set 19, cont.

these documents and/or the meetings, you have the right to suggest additional meetings, a recirculation of the documents, and additional time for public comment.

19-2

Second, the alternate route that the CPUC is endorsing over PG&E's proposal is a more costly alternative. These construction costs, though paid for by PG&E, would ultimately be borne by the ratepayer, which would be the vast majority of us who subscribe to PG&E at our businesses and residences.

19-3

Third, construction along the alternate route, would impact all of us who conduct business in the East of 101 Area. The Draft EIR inaccurately characterizes the East of 101 Area as an industrial area that would be minimally impacted by the project. As we all know, the Area East of 101 has changed dramatically in the last 10 years and for businesses along Gateway Boulevard, underground construction for any period of time poses a major inconvenience to employees and business colleagues who will have difficulty getting to and from their office on a daily basis. Further, this underground work poses the risk of disturbing critical infrastructure such as data, telephone and existing power.

19-4

There are other numerous concerns such as the potential release of capped hazardous material in the areas closer to Oyster Point (former Bethlehem and US Steel sites). To view the full Draft EIR, go to [http://www.cpuc.ca.gov/Environment/info/aspn/jefferson\\_martin/deir.htm](http://www.cpuc.ca.gov/Environment/info/aspn/jefferson_martin/deir.htm)

WRITTEN COMMENTS ON THE DRAFT EIR MUST BE POSTMARKED OR RECEIVED BY FAX OR E-MAIL NO LATER THAN AUGUST 28, 2003. SINCE MANY OF US WERE NOT NOTIFIED IN A TIMELY MANNER, THAT MEANS COMMENTS NEED TO BE SENT IN LESS THAN TWO WEEKS! Send comments as soon as possible to:

Billie Blanchard, CPUC

c/o Aspen Environmental Group

235 Montgomery Street, Suite 935

San Francisco, CA 94104

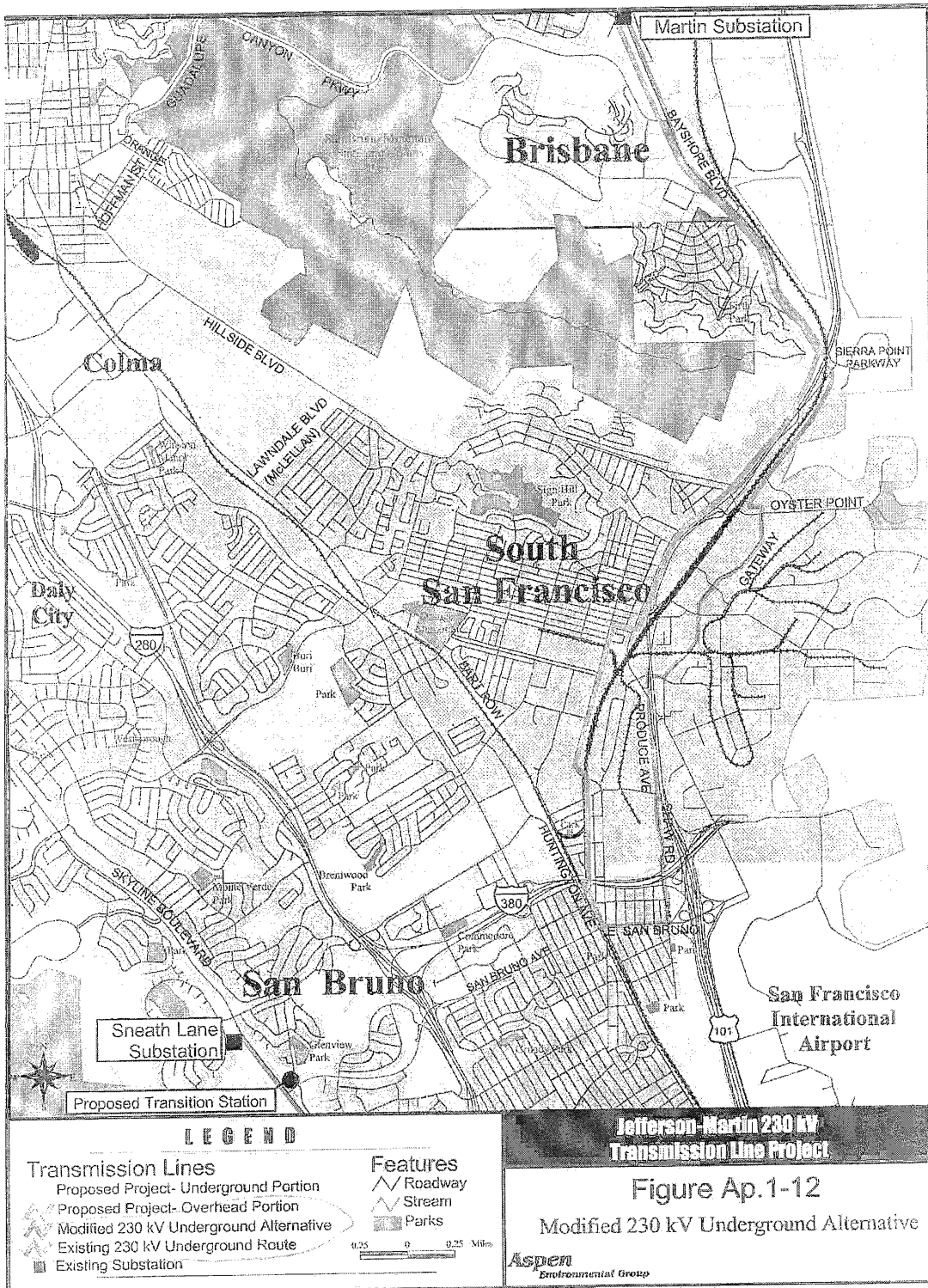
FAX: 650.240.1720

E-mail: [jeffmartin@aspeneg.com](mailto:jeffmartin@aspeneg.com)

Thank you for your thoughtful review of this project that is sure to impact all of us in one form or another.(See attached file: PG&E.pdf)

Rene J. Guibert, RPA  
Property Manager  
Boston Properties - Gateway Commons  
(650) 873-7870 - Phone  
(650) 583-8160 - Fax

Comment Set 19, cont.



## Responses to Comment Set 19 – Barbara Pavis

- 19-1 The commenter's opposition to the use of Gateway Boulevard to Oyster Point Boulevard and support for the originally proposed route are noted. Several mitigation measures are identified in the Draft EIR that are designed to minimize disruption impacts to businesses. Refer to Draft EIR transportation and traffic Mitigation Measures T-1a (Prepare Transportation Management Plans), T-1b (Restrict Lane Closures), and T-3a (Repair to Damaged Road ROWs); traffic Applicant Proposed Measures (APMs) 13.6 (restricted access plan) and 13.8 (detours for pedestrian and bicycle access); land use Mitigation Measures L-4a (Provide Construction Notification), L-4b (Provide Public Liaison Person and Toll-Free Information Hotline), L-7a (Provide Continuous Access to Properties), and L-7b (Coordinate with Businesses); noise APM 15.1 (noise suppression techniques); and utilities Mitigation Measure U-1b (Protection of Underground Utilities).

## Comment Set 20

August 20, 2003

Billie Blanchard @PUC  
c/o Aspen Environmental Grp.  
235 Montgomery St., Suite - 935,  
San Francisco, Ca. 94104

Re: Jefferson-Martin 230 kV Transmission Line Project

Dear Billie Blanchard:

If San Francisco needs more power, they should run the wires on the West side of 280 and underground under Sneath Lane (San Bruno) to East of 121.

20-1

Thank you,  
Ruth E. Jacobs,  
2965 Arguello Ave,  
Berkeley, Ca.  
94701

## Responses to Comment Set 20 – Ruth E. Jacobs

- 20-1 The commenter's support for routes west of I-280 is acknowledged. It is noted that a significant portion of the Partial Underground Alternative would be west of I-280 (north of Hayne Road). In addition, please see Response to Comment PPH1-10 regarding the EIR's consideration of alternatives west of I-280. Use of Sneath Lane is also considered in the EIR, as is an alternative that would roughly parallel Highway 101 (Modified Underground Existing 230 kV Collocation Alternative). The commenter's support for use of Sneath Lane in conjunction with the Modified Underground Existing Collocation Alternative is noted.