LAWYERS

Davis Wright Tremaine LLP

ANCHORAGE BELLEVUE CHARLOTTE HONOLULU LOS ANGELES NEW YORK
PORTLAND SAN FRANCISCO SEATTLE WASHINGTON, D.C. SHANGHAI

JEFFREY P. GRAY
jeffreygray@dwt.com

SUITE 600
ONE EMBARCADERO CENTER
SAN FRANCISCO, CA 94111-3611

TEL (415) 276-6500
FAX (415) 276-6599
www.dwt.com

February 27, 2003

VIA ELECTRONIC MAIL AND REGULAR MAIL

Billie C. Blanchard
Energy Division
California Public Utilities Commission
c/o Aspen Environmental Group
235 Montgomery Street, Suite 800
San Francisco, CA 94104-2906

Re: A.02-09-043; Scoping Comments - Jefferson-Martin 230 kV Transmission Line Project

Dear Ms. Blanchard:

This letter identifies for the Energy Division and the Aspen Environmental Group alternatives to the Jefferson-Martin 230 kV Transmission Line Project proposed by PG&E ("Proposed Project") that the 280 Corridor Concerned Citizens Group ("280 Citizens") believes must be included in the scoping and preparation of the Environmental Impact Report ("EIR") for the Proposed Project.

The 280 Citizens is an ad hoc nonprofit organization comprised of residential ratepayers of PG&E who live in the Proposed Project area. The members of 280 Citizens share a common interest in ensuring that the health and safety of local residents, community values and the environment are preserved and protected, and that the potentially significant adverse impacts related to the Proposed Project are avoided or mitigated. While 280 Citizens as a group, and many of its members individually, attended and participated in the public scoping meetings addressing the Proposed Project, we are providing these written comments in an effort to further assist you in the scoping and preparation of the EIR.

280 Citizens believes that it is not at all clear that the Proposed Project is needed to meet future demand or that it is best suited to meet the project objectives articulated by PG&E in A.02-09-043. To the extent the Proposed Project is needed, the 280 Citizens believes that a

number of alternatives to PG&E's Proposed Project Route[1] exist that can better mitigate a number of the potentially significant adverse environmental impacts related to the Proposed Project Route and configuration.

I. DEFICIENCIES IN PG&E'S PROPOSAL

PG&E's proposal suffers from a number of deficiencies that must be considered in the environmental analysis comparing PG&E's Proposed Project and Proposed Project Route with alternative solutions that either better address the Proposed Project's objectives or more effectively mitigate a number of the adverse environmental impacts that will result from the Proposed Project Route and configuration. The following are a few of the issues that 280 Citizens believes merit consideration.

1. Future Demand Is Overstated

Although PG&E's most recent load forecast completed in August 2002 is 250 to 350 MW lower than its 1999 and 2000 forecasts, the August 2002 forecast is still 50 percent higher than the 10MW per year historical average recorded growth in peak load.[2] Moreover, based on recent economic information it appears likely that the Bay Area economy will remain sluggish in the near term. The Association of Bay Area Governments recently reported that 58,700 jobs were lost in the area in 2002 and that these jobs are not likely to be restored before the end of 2004.[3] In addition, the office vacancy rate in San Francisco and northern San Mateo county is approximately 20% and 26% respectively.[4] Given that electric demand is directly linked to the economy, based on recent information, the near term growth in demand is likely to be less than recent historical trends and significantly less than PG&E's forecasts.

2. Additional Generation Should Be Considered

PG&E's information pertaining to the electrical supply likely to be available in the area, including local generation alternatives is outdated. To the extent it is believed that existing facilities cannot meet future demand, increased local generation should be considered as an alternative to the Proposed Project. According to the California Independent System Operator ("ISO"), a 400 MW power plant connected to the Potrero 115kV Substation would be an effective long-term solution to the future electric demand in the San Francisco area and that other

---

[1] The Proposed Project Route consists of locating the proposed 230 kV line overhead along the existing 60 kV right-of-way ("ROW") from the Jefferson Substation to San Bruno Avenue. At San Bruno Avenue, the line would go underground to the Martin Substation.

[2] *See* PG&E A.02-09-043, Table 2-1 at 2-12; *San Francisco Peninsula Long-Term Electric Transmission Planning Technical Study (2004-2009) Final Report*, Cal-ISO Stakeholder Process Joint Study, October 24, 2000 at 18.

[3] *Bright Spots and Dull Patches: Regional Economic Outlook 2003-2004*, Conference by the Association of Bay Area Governments, January 30, 2003.

[4] *Id.*

potential generation sites could prove to be equally effective.[5] With respect to the Proposed Project, the ISO has further concluded that the Proposed Project may only be needed should new generation not materialize.[6]

Local generation better addresses supply and reliability issues raised in A.02-09-043 because it locates supply closer to demand and diversifies the points where supply can serve load. According to the ISO, generation located north of the Martin Substation will provide the greatest reliability benefits to San Francisco. The Proposed Project contemplates increasing reliability by locating a new 230 kV line outside of the Highway 101 corridor (where existing transmission lines serving San Francisco and northern San Mateo county are located). The Proposed Project, however, would terminate the new 230 kV line at the same substation (Martin Substation) where existing transmission lines currently terminate. Accordingly, the reliability benefits associated with locating the new 230 kV line outside of the Highway 101 corridor will be minimized.

3. High Voltage Lines Are Incompatible With Residential Neighborhoods

A 230 kV line is inherently dangerous and puts the health and safety of the men, women and children who live, work and play in the vicinity of such a line at risk. PG&E's Application and Proponents Environmental Assessment ("PEA") do not adequately consider the most recent information concerning potential health and safety risks associated with electric and magnetic fields ("EMFs") from high voltage electric transmission lines nor adequately address the potential adverse impacts of the Proposed Project on the health and safety of residents, including children who live and attend schools in the immediate vicinity of the Proposed Project Route.

The California Department of Health Services ("DHS") recently identified significantly greater risks associated with human exposure to EMFs than prior studies and reports have indicated. Specifically, DHS has found that EMF exposure can cause some degree of increased risk of miscarriages, childhood leukemia, adult brain cancer, and ALS.[7] DHS has also found that residents with a "time weighted average" greater than 2 milliGauss ("mG") are considered to be "substantially exposed" to EMFs and that this level of exposure can be associated with living within close proximity to 69kV to 230kV electric transmission lines.[8] In its application for the Proposed Project, PG&E has indicated that EMF levels at the edge of its ROW may range from 10 mG to 90 mG.[9] These levels are *considerably higher* than the level DHS has characterized as "substantially exposed" and at which serious health risks may arise.

---

[5] *San Francisco Peninsula Long-Term Electric Transmission Planning Technical Study (2004-2009) Final Report*, Cal-ISO Stakeholder Process Joint Study, October 24, 2000 at 2.

[6] *Id.* at 3.

[7] *An Evaluation of the Possible Risks From Electric and Magnetic Fields (EMFs) From Power Lines, Internal Wiring, Electrical Occupations, and Appliances*, June 2002, Executive Summary at 3.

[8] *Policy Options in the Face of Possible Risk From Power Frequency Electric and Magnetic Fields (EMF)*, June 2002 at 4.

[9] Application, Tab F at 3.

4. The Proposed Project Will Result In Significant Visual Impacts

The Proposed Project will have significant visual impacts in the residential areas fronting the I-280 corridor in the communities of Millbrae, Hillsborough, San Carlos, Woodside, Redwood City, Burlingame and San Mateo Highlands. These impacts will result by replacing and reconstructing PG&E's existing 60kV transmission towers and poles on overhead portions of the Proposed Project Route with much taller and more intrusive 230kV towers.

5. The Proposed Project Will Result In Significant Noise Impacts

Aboveground portions of the Proposed Project will significantly increase corona noise levels. This is a particular problem in areas where the Proposed Project is located near residential areas and schools.

6. The Proposed Project Will Have An Adverse Impact On Community Values

PG&E has not adequately considered the adverse effects on community values in the Proposed Project areas. The overhead portion of the Proposed Project will be routed through residential areas in San Mateo, Hillsborough and Burlingame. Locating a new high voltage transmission line in these areas will conflict with the community values of these communities and adversely impact property values in the immediate vicinity and in the view shed of the Proposed Project.

II. FEASIBLE ALTERNATIVES THE COMMISSION SHOULD REVIEW

According to PG&E, the proposed Project is needed to meet projected electric demand in San Francisco and northern San Mateo county and to improve reliability in these areas. PG&E also notes that an objective of the proposed Project is to eliminate the existing "all eggs in one basket" approach by providing for a second independent transmission line pathway to serve San Francisco and northern San Mateo county. The Proposed Project does not appear to be best suited to meet these objectives.

1. No Project Alternative

As discussed above, based on recent information, the near-term growth in demand is likely to be less than recent historical trends and significantly less than PG&E's forecasts. Accordingly, it is not clear that the proposed Project is needed.

2. Local Generation/Distributed Generation

If it is found that existing generation and transmission facilities cannot meet expected demand, increased local generation should be considered as an alternative to the Proposed Project. With respect to potential new generation sources, the City of San Francisco has recently acquired four 50 MW turbines from the State as a result of the State's recent settlement with Williams. These turbines have a combined capacity of 200 MW and possibly more depending

on their configuration. The California Energy Commission ("CEC") staff has also recommended that the CEC license Mirant's proposed 540 MW Potrero Power Plant Unit 7 Project with certain mitigation.[10] The four 50 MW turbines combined with the 540 MW Potrero Unit 7 would increase electric supply in the San Francisco area by almost 750 MW, well in excess of the 400 MW the ISO has found would be an effective long-term solution to the future electric demand in the San Francisco area (*see* above). In addition to these resources, the CEC's Final Staff Assessment for the Potrero Unit 7 project identifies a number of additional sites where local generation can be located to further meet future demand and increase reliability without the need for the Proposed Project. Many of these sites are owned or controlled by the City and County of San Francisco.[11]

In addition, in November 2001, San Francisco voters authorized the issuance of $100 million for the acquisition, construction and installation of renewable energy and energy-efficiency projects for City agencies, departments and enterprises ("Proposition B"). Voters also authorized the San Francisco Board of Supervisors to issue revenue bonds for renewable energy and energy-efficiency projects for the private sector or City projects without requiring a vote of the electorate ("Proposition H"). The San Francisco Public Utilities Commission ("SFPUC") has identified specific solar photovoltaic and wind projects that would qualify for financing under Proposition B, and both SFPUC and San Francisco Department of Environment anticipate working with the private sector and appropriate City agencies to facilitate the installation of renewable and energy-efficient technologies in commercial and residential properties.[12] San Francisco plans to install solar generating facilities at the Moscone Center and believes that at least 50 MW of solar power can be installed in San Francisco.[13] Recently, PG&E has revised its forecast of customer self-generation to be installed in its service territories in the near term. PG&E expects 1,093 GWh of self-generation to be installed in its service territory in 2003.[14]

Increasing distributed and self-generation projects in the San Francisco area, combined with larger local generation projects, may address demand and reliability issues much more effectively than the Proposed Project.

3. Demand Reduction

As noted above, $100 million has been authorized for the acquisition, construction and installation of renewable energy and energy-efficiency projects in San Francisco. In a study commissioned by PG&E, it was found that approximately 13 percent of the peak demand in the

---

[10] *Potrero Power Plant Unit 7 Project (00 AFC 4) Final Staff Assessment*, California Energy Commission, February 13, 2002 at 1-6 – 1-7.

[11] See *Id.* at 7-16 – 7-19.

[12] *The Electricity Resource Plan, "Choosing San Francisco's Energy Future,"* San Francisco Public Utilities Commission and San Francisco Department of Environment, December 2002 at 37.

[13] *Id.* at 58.

[14] *Pacific Gas and Electric Company DWR Revenue Requirement Supplemental Information* at 6, filed as an attachment to *Pacific Gas and Electric Company's Pleading Pursuant To Ordering Paragraph 5 of Decision 02-12-045* dated December 27, 2002 and filed in A.00-11-038.

commercial sector in PG&E's service territories[15] could be reduced on a cost-effective basis.[16] The study also estimated that energy efficiency programs can realize electricity savings that are much greater than currently being realized.[17] In San Francisco, the SFPUC is continuing energy efficiency programs that it expects will reduce peak demand by 4 MW by 2004. In addition, the SFE and SFPUC have begun providing design and technical support to private sector developers to assist in the integration of energy efficient features into the new developments. Presently, the SFE is overseeing a $7.8 million retrofit program to install energy-efficient lighting in 4000 small businesses in San Francisco, with a goal of reducing peak demand by 6 megawatts.[18]

The above programs are just a few examples of the steps being taken to reduce electric demand in the San Francisco area. These projects and other demand reduction programs should be taken into account when evaluating the Proposed Project. Combined with additional local and self-generation projects, demand reduction efforts may address demand and reliability issues much more effectively than the Proposed Project.

4. Alternative Routes

Alternative routes and configurations for the southern portion of the Proposed Project (from the Jefferson Substation to San Bruno Avenue) provide superior solutions to PG&E's Proposed Project Route. Alternative designs and configurations can eliminate or better mitigate a number of the adverse environmental impacts that will result from the Proposed Project Route and configuration. The following are a few alternative designs that 280 Citizens believe warrant evaluation by the Energy Division and Aspen Environmental Group.

(a) Modified Underground/Overhead Route Along Or Near The Existing 60 kV Line ROW

This alternative would involve locating the 230 kV line, for the most part, along or near the existing ROW for the 60kV line (proposed route for Segment 1A[19] from the Jefferson Substation to San Bruno Avenue). However, whereas Segment 1A is contemplated to be overhead from the Jefferson Substation to San Bruno Avenue, this alternative would consist of underground segments in places where the line is located near residential areas. These underground segments should be located a sufficient distance west of the existing ROW or the furthest western point in a future 230 kV ROW to mitigate EMFs and other potential adverse

---

[15] Approximately 133 MW.

[16] *Commercial Sector Energy Efficiency Potential Study*, Xenergy Inc., July 2002 (cited in *The Electricity Resource Plan, "Choosing San Francisco's Energy Future,"* San Francisco Public Utilities Commission and San Francisco Department of Environment, December 2002 at 55).

[17] *Id.*

[18] *Id.* at 56.

[19] Segment 1A is shown at Figure 3-1 of the PEA.

impacts to people who live and work in the vicinity of the lines.[20] Because this route would be along or near the existing 60 kV line, the existing 60 kV line could and should be relocated underground in places where the 230 kV line will be placed underground. This alternative will address a number of the adverse environmental impacts that will result from the Proposed Project Route and configuration. Among its benefits, this alternative will lessen visual impacts in the residential areas fronting the I-280 corridor in the communities of Millbrae, Hillsborough, San Carlos, Woodside, Redwood City, Burlingame and San Mateo Highlands. This alternative could also reduce impacts from corona noise related to the 230 kV line, reduce impacts from EMFs, and mitigate impacts to community values along the proposed route.

With respect to its location and configuration, this alternative route would locate the new line overhead along Segment 1A from the Jefferson Substation to the Ralston Substation then underground to the Hillsdale Substation (approximately MP 6.4; just north of Bunker Hill). At the Hillsdale Substation, the line would continue overhead across the canyon to approximately MP 6.9 and then underground to Carolands Substation (approximately MP 8.6; Skyline Boulevard just north of Black Mountain Road). From the Carolands Substation, the line would go overhead to approximately MP 9.9. At approximately MP 9.9, the route for the line would then deviate from Segment 1A and move west of I-280 to approximately MP 10.9 where the line would then continue along Segment 1A to San Bruno Avenue. As noted above, the underground segments would include the existing 60 kV line and would be located a sufficient distance west of the existing ROW or the furthest western point in a future 230 kV ROW to mitigate potential health impacts.

(b) Underground To Trousdale Drive

This alternative route would locate the line underground from the Jefferson Substation along Canada Road and Skyline Boulevard to Trousdale Drive. Although this route deviates from the existing 60 kV ROW, moving the existing 60 kV line underground with the proposed 230 kV line should be considered.[21] From Trousdale Drive at least 2 alternatives would exist:

(i) At or near Trousdale Drive, the line would go overhead west of I-280 along Segment 1A to San Bruno Avenue.

(ii) At Trousdale Drive, the line would continue north underground along Skyline Boulevard until San Bruno Avenue. At two points (Trousdale to Millbrae Avenue and Larkspur Road to the Pacifica Exit) the line would need to parallel I-280.

[20] In some locations were the existing 60 kV ROW is a sufficient distance away from houses so as to not raise concerns regarding EMF hazards, it may not be necessary to locate the underground portion of the line outside of this ROW

[21] It is 280 Citizens' understanding that moving the existing 60 kV line from its current location may require the installation of some lateral lines to connect the 60 kV line to certain substations.

By locating the line underground in areas near residential areas, this alternative could mitigate visual impacts and impacts related to EMFs and corona noise.

(c) Underground To The Carolands Substation

This alternative route would locate the line underground from the Jefferson Substation along Canada Road and Skyline Boulevard to the Carolands Substation. From the Carolands Substation, the line would go overhead to approximately MP 9.9 along Segment 1A. At approximately MP 9.9, the route for the line would move west of Hwy 280 to approximately MP 10.9 where the line would then continue along Segment 1A to San Bruno Avenue.

This alternative would require less undergrounding than Alternative (b) above and locate the line underground or overhead west of I-280 in areas near residential neighborhoods, which could mitigate visual impacts and impacts related to EMFs and corona noise. Although in places this route deviates from the existing 60 kV ROW, relocating the 60 kV line to the proposed route for the 230 kV should be considered.

(d) Underground To MP2

This alternative route would locate the line underground along Segment 1B from the Jefferson Substation to approximately MP 2, then overhead along Segment 1A to the Ralston Substation. From the Ralston Substation, the line would then go underground west under I-280 and continue underground along Canada Road and Skyline Boulevard to Trousdale Drive. At Trousdale Drive, both of the alternatives noted above in section (c) would exist.

By locating the line underground in areas near residential areas, this alternative would mitigate visual impacts and impacts related to EMFs and corona noise. Relocating the existing 60 kV line to the proposed route for the 230 kV line should also be considered.

(e) Move Line West of Existing 60kV ROW

This alternative route would locate the line west of the existing 60 kV ROW. There are a number of variations of this alternative including, (i) moving the line west of I-280; or (ii) moving the line west of the existing 60 kV ROW but staying east of I-280 (except where Segment 1A is located west of I-280). To the extent portions of the line are located east of I-280, the line should be located underground near residential areas.

By moving the line west of the existing 60 kV line ROW, the above noted impacts to residential neighborhoods can be mitigated. Relocating the existing 60 kV line to the proposed route for the 230 kV line should also be considered.

(f) Moraga Substation to Potrero Substation

This alternative route consists of constructing a 230 kV line connecting the Moraga and Potrero Substations. The line would cross from Oakland to San Francisco either (i) along the

BART transbay tube; (ii) along the Bay Bridge; (iii) underwater cable, or (iv) a combination of the Bay Bridge and underwater cable.[22] Because this alternative would involve a completely independent transmission line into San Francisco that would not go through the Martin Substation, this alternative would increase reliability significantly better than the Proposed Project.

The 280 Corridor Concerned Citizens Group thanks you for the opportunity to provide the above comments on the scope and preparation of the EIR. 280 Citizens looks forward to further working with you during this process.

Very truly yours,

Davis Wright Tremaine LLP

Jeffrey P. Gray, Esq.
Attorneys for the
280 Corridor Concerned Citizens Group

cc: Susan Lee (by electronic mail)
Administrative Law Judge Charlotte Terkeurst
Commissioner Loretta M. Lynch

[22]The ISO has found that this alternative (i) meets reliability needs until at least 2009; (ii) would decrease exposure to interruptions associated with the San Mateo Substation which is essentially the only source of externally generated power to the San Francisco area; and (iii) would reduce the need for an RMR contract (or similar mechanism) for generation on the San Francisco Peninsula. *San Francisco Peninsula Long-Term Electric Transmission Planning Technical Study (2004-2009) Final Report*, Cal-ISO Stakeholder Process Joint Study, October 24, 2000 at 8. Although the ISO has identified this alternative route as an alternative to the Jefferson-Martin Transmission line, it is 280 Citizens' understanding that the ISO has not conducted a full study of this alternative.