

State of California  
State Energy Resources Conservation and Development Commission

In the Matter of:	)	Docket # 09-AFC-03
	)	
Mariposa Energy Project	)	
	)	Robert Sarvey's Rebuttal Testimony
	)	Hazardous Materials
	)	Exhibit 405

The Mariposa Energy Project (MEP) proposes a new 580-foot long natural gas pipeline which would connect the project to PG&E's Line 002 which is an existing high-pressure natural gas pipeline located northeast of the project site.<sup>1</sup> Line 002 is a 26 inch diameter natural gas pipeline that was installed in 1971. The coating on L-002 is a double tape wrapped coating which no longer meets Federal standards because it is prone to corrosion. The pipeline thickness is .322 inches. The maximum allowable operating pressure for the line is 890 PSIG. Recent pipe-to-soil data have indicated corrosion on Line 002 within the Tracy area. A smart pig examination was performed in 2001 which indicated that the line had wall loss of up to 78%. Subsequent examination by PG&E revealed that actual wall loss was 61%. PG&E realized that the area found was unacceptable and lowered the operating pressure to 530 psig and performed repairs on the pipeline.<sup>23</sup> The pipeline has experienced two leaks in the Tracy Area one in 1997 and one in 1999. The line also supplies the existing Tracy Peaker Plant and will supply the approved Tracy Combined Cycle Project when constructed.

PG&E operates two natural gas pipelines in the right of way for line 002; a 36 inch diameter transmission line designated as L-401 and the 26 inch diameter transmission line designated as L-002 which will serve the MEP. This right-of-way also includes an 18 inch petroleum pipeline operated by Chevron. The other natural gas line

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<sup>1</sup> SSA Page 1-3

<sup>2</sup> CPUC Proceeding PG&E data Response Page 0296 Exhibit 413

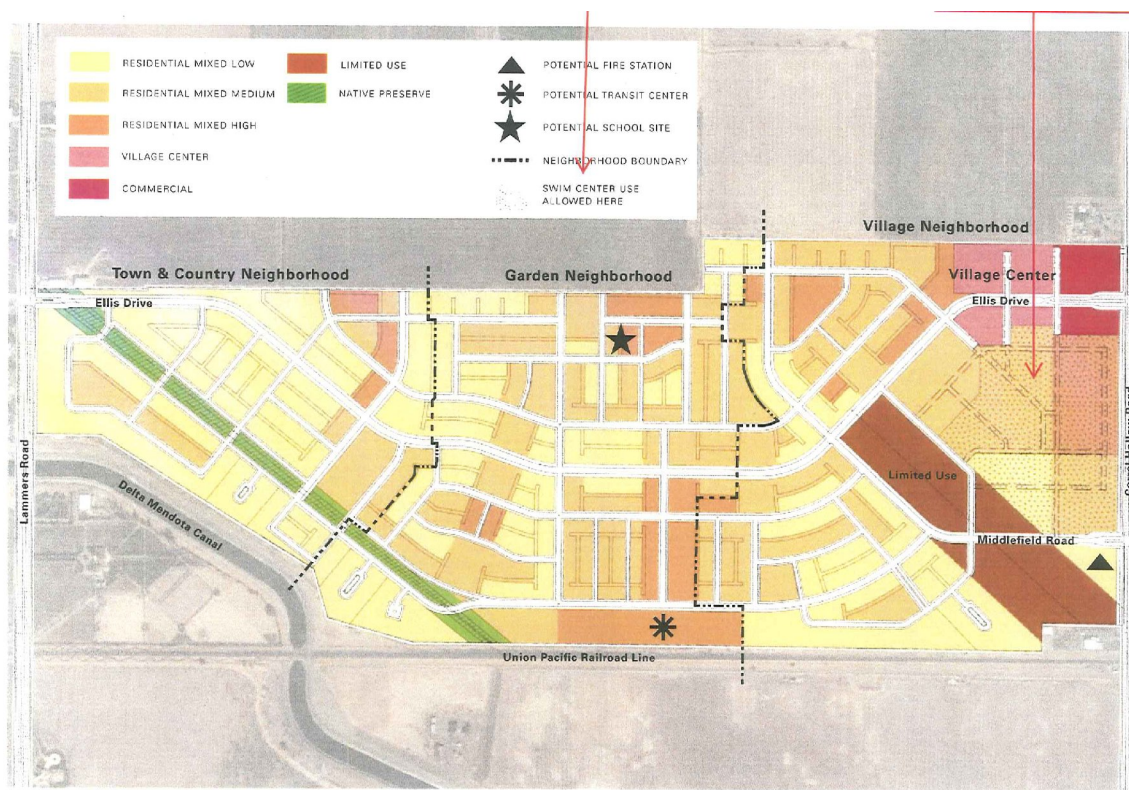
<sup>3</sup> This would be below the acceptable operating pressure to supply the Tracy Combined cycle Plant and impact the MEP. Tracy Combined Cycle AFC Page 2-17

[http://www.energy.ca.gov/sitingcases/tracyexpansion/documents/applicant/afc/Volume\\_1/GWF\\_Tracy\\_2\\_Project\\_Description.pdf](http://www.energy.ca.gov/sitingcases/tracyexpansion/documents/applicant/afc/Volume_1/GWF_Tracy_2_Project_Description.pdf)

401 was installed in 1993. The Chevron pipeline is an 18 inch diameter pipeline installed in 1950.

Operations of transmission pipelines pose significant public risks when they are operated in close proximity to areas that are heavily occupied by the public. Significant failures of transmission pipelines can and have resulted in loss of life, personal injury, property damage, and environmental damage. According to the TRB, *“In the last 3 years, hazardous liquids pipeline incidents have resulted in an average of 2 deaths, 11 injuries, and \$97 million in property damage each year; natural gas transmission pipeline incidents have resulted in an annual average of 6 deaths, 10 injuries, and \$20 million in property damage.”* Of course the recent San Bruno incident underscores the potential danger from a natural gas line malfunction. The presence of three pipelines in this one pipeline corridor triples the consequences of a failure of Line 002.

These three lines run through a newly approved residential development called the Ellis Project in Tracy. The Ellis subdivision is a 2,250 home subdivision with a planned aquatics park.<sup>4</sup>



<sup>4</sup> Ellis Specific Plan <http://www.ci.tracy.ca.us/modules/dms/index.php>

These pipelines also run through Mountain House. They run through an area that is residential and has a planned 31 acre community park. The following depicts the area from the Mountain House Specific Plan.

### Excerpt from Mountain Specific Plan III



For the MEP the natural gas requirement during base load operation at annual average ambient temperature is approximately 1,926 million British thermal units per hour (MMBtu/hr) (higher heat value [HHV] basis, total for four CTG units), or 44.9

million dry standard cubic feet.<sup>5</sup> As mentioned above the Tracy Combined Cycle Project will also increase the volume of natural gas required to be transported though Line 002. The new maximum total natural gas requirements (heat input) during base load operation for two CTGs and duct burners will be approximately 68,000 MMBtu per day or 2,833 MMBtu per hour, and a facility total (including auxiliary boiler) of 21,203,661 MMBtu per year on a higher heating value basis. According to the Tracy Combined Cycle AFC the pressure of natural gas delivered to the site via PG&E's existing Line #2 pipeline that crosses GWF's 40-acre parcel is expected to be 600 to 1,015 pounds per square inch gauge (psig). The minimum supply pressure to the equipment would be 535 psig.<sup>6</sup> As mentioned above the MAOP for Line 2 is 890 PSIG.

The combination of these two projects and their impacts to the degraded PG&E Line 002 are not addressed or analyzed in Staff's testimony. A significant increase in natural gas volume will occur because of the addition of the MEP and the conversion of the Tracy Peaker Project to combined cycle. Pipeline pressure fluctuations from the cycling of these projects will cause additional stress to Line 002. Given the significant risks of a natural gas line failure as evinced by the recent San Bruno Tragedy this impact needs to be addressed. We certainly cannot rely on PG&E's incomplete and inaccurate records and inadequate safety practices.

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<sup>5</sup> AFC Page 2-17

<sup>6</sup> Tracy Combined Cycle AFC Page 2-17

[http://www.energy.ca.gov/sitingcases/tracyexpansion/documents/applicant/afc/Volume\\_1/GWF\\_Tracy\\_2\\_Project\\_Description.pdf](http://www.energy.ca.gov/sitingcases/tracyexpansion/documents/applicant/afc/Volume_1/GWF_Tracy_2_Project_Description.pdf)

