FOOD EMPOWERMENT PROJECT
Because your food choices can change the world

public.advisor@cpuc.ca.gov

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CPUC Public Advisor's Office
505 Van Ness Avenue
San Francisco, CA 94102

Reference: Dairy Biomethane Pilot Project Application A.23-04-005

Dear Commissioners,

We are submitting comments on behalf of Food Empowerment Project (F.E.P.), an organization incorporated and based in California in an area served by PG&E.

We write to voice our opposition to requiring rate-payers to cover the additional costs of the Merced Dairy Biomethane Pilot Project. We believe the costs to be unreasonable, burdensome to the local community, and the responsibility of the project developers rather than the rate-payers. Furthermore, we object to providing public money to cover the cost of greenhouse gas mitigation measures (dairy methane biodigesters) that we believe to be a false solution to climate change and one which exacerbates and further entrenches numerous environmental and social injustices.

Industrial dairy farms negatively impact local communities – primarily Latinx communities – and the State of California as a whole by decreasing local air quality and adversely impacting human and environmental health. While biodigesters may have the potential to mitigate some methane emissions from manure they may increase ammonia emissions while simultaneously incentivizing larger herd sizes which can potentially increase emissions from enteric fermentation. Greenhouse gas mitigation efforts within the dairy industry should focus on fundamentally addressing production through a just transition away from animal-based dairy production and towards climate-friendly plant-based milk production rather than focusing on small scale fixes within the animal-based production chain such as biodigesters. The narrow focus on manure emissions mitigation doesn't foundationally address the harms that dairy farms cause to human and non-human animals and the environment.

F.E.P. has three main concerns about this project:

1. The costs are unreasonable and should be paid by the developers, not community members

The Merced Dairy Biomethane Pilot Project was approved to spend $10,183,855 yet it has spent a total of $18,802,033, thus going $8,618,178 over budget. This project has spent almost double what it was approved for and PG&E ratepayers should not be burdened with this exorbitant cost.

Table 2-1 of PG&E's submitted testimony shows a breakdown of where these costs are coming from, for instance costs related to biogas treatment have gone almost $2.5 million over budget and costs related to collection lines to bring more dairies into their pipelines have gone almost $4 million dollars over budget. This is far beyond any cost that could be considered reasonable. One of the stated goals of the Dairy Biomethane Pilot Project is to show cost effectiveness and feasibility of biodigester projects, as is stated on page 2 of the Selection Committee's scorecard:

> "All of the selected pilot projects are required to participate in pilot project evaluation studies with the member agencies of the Selection Committee and the California Energy Commission (CEC) and to report specified data so that the state can learn valuable California dairy-specific information concerning the feasibility and cost effectiveness of these pilot projects."

The dramatic overspending of the Merced Dairy Biomethane Pilot Project shows that this project is not the cost effective greenhouse gas mitigation solution it was purported to be. The question remains whether the other selected pilot projects have also gone so far over budget or whether the issue is specific to this project. These factors should be considered when evaluating the overall outcomes of the Dairy Biomethane Pilot Project.

Many PG&E customers already have substantial difficulty paying their bills. While this project on its own would add only a small amount to their total bill it occurs alongside other increases, which have been compounding in recent years. Many people find themselves in the impossible situation of needing to choose between paying their gas and electric bill or affording groceries that week. This is an area where "one in every five people live below the poverty line and the 23.5% poverty rate is the sixth highest of 386 U.S. metro areas ..." They simply cannot shoulder the additional burden by covering the cost of this developer's overspending. https://www.thecentersquare.com/california/article_ec059b15-4dd5-583c-be0b-6b212c3901d0.html#:~:text=The%20Merced%20metropolitan%20area%20in,metro%20areas%20with%20available%20data.

2. Community Impacts

As a company that has harmed communities throughout California, PG&E should be very concerned about the impact the Merced Dairy Biomethane Pilot Project has on the people living in Merced. The community there is already dealing with environmental racism, as the majority of the people living in that community are Latinx. While this case involves the project's cost, not acknowledging the serious damage biodigesters can have on the communities is just a blatant example of government and corporations burying their heads in the sand – or, in this case, manure.

Merced's population is already heavily impacted by agricultural pollution, and Merced is considered to be one of the country's most polluted places to live; indeed, a recent State of the Air report by the American Lung Association ranked Merced County as being the 19th worst for year-round particle pollution nationwide. https://www.lung.org/research/sota/city-rankings/states/california

Particle pollution can be worsened by methane biodigesters. While digesters may mitigate some methane emissions there is evidence that they can increase ammonia emissions. Ammonia is a precursor to PM2.5, the particles of which are a form of deadly air pollution that heavily impacts Merced. Particulate pollution negatively impacts the health of local communities. Greenhouse gas pollution mitigation measures should always be considered alongside community and environmental health. The adverse health impacts of biodigesters are still actively being explored, as is documented by journalists at *Inside Climate News*:

> "Emerging research suggests that after the digesters process the manure, it emits ammonia, which can travel long distances to contaminate water and soil and threaten ecosystems. Communities nearby also worry that the ammonia emissions will contribute to particulate matter that is seriously dangerous to human health. In essence, the digester program could undercut the state's overarching environmental goals and public health priorities."

This investigative journalism notes that Maas Energy Works, which is also the developer for the Merced Dairy Biomethane Pilot Project does not mitigate ammonia emissions at their digesters: "Neither California Bioenergy nor Maas Energy Works, the companies responsible for more than 90 percent of the 117 state-funded digester projects funded by the California state government, mitigate ammonia emissions from storage of digested manure."

Inside Climate News has documented first hand experiences of community members who have been negatively impacted by dairy digesters:

> "Maria Arevalo, a resident of the San Joaquin Valley town of Pixley, said that a digester installed north of the community had actually made the dairy smell worse. "It has a burning odor—it smells bad, of burning cow waste," Arevalo said. "They think they're making it better, but the industry has the same [number of] cows and they keep buying more, and more, and more. And the digesters still release gas, chemicals and emissions into the community."

https://insideclimatenews.org/news/19092022/dairy-digesters-methane-california-manure/

The Merced Dairy Biomethane Pilot Project proposal and CARB project scoring document both acknowledge that the project will periodically vent and flare excess methane leading to additional on-site emissions. This has negative air quality and health implications for local communities. Now that this project has been constructed it is important that the effects on the local community be assessed. More should be done to understand how the local communities around the Merced Dairy Biodigester Pilot Project are being impacted.

In addition to biodigesters having direct impacts on air quality and human health, dairy farms have additional harmful impacts. It's difficult to not acknowledge that the dairy industry is in itself

a legacy of colonization, and the consumption of animal-sourced milk is not in the best interest of many Californians who suffer when they consume it. We at F.E.P. use the term *lactose normal* to define those who are unable to digest the milk of a cow, since nature never intended humans to consume milk after infancy. Even Marion Nestle, professor emerita of nutrition, food studies, and public health at New York University, noted in an article for *Smithsonian Magazine,* "Milk is not essential after infancy, and people who choose not to drink it can get those nutrients from other sources quite easily." https://www.smithsonianmag.com/history/nut-milks-are-milk-says-almost-every-culture-across-globe-180970008/

The population of California is incredibly diverse and the majority of them do not digest dairy. https://www.ppic.org/publication/californias-population/ Even many in the younger generation known as Gen Z consider milk to be bad for the environment or unhealthy. As noted recently in *The New York Times*, "Milk has a tougher battle with Generation Z. Born between 1997 and 2012, it's the country's most diverse ever. A bare majority are white, and 29 percent are immigrants or the children of immigrants. Many come from backgrounds in which lactose intolerance is common." https://www.nytimes.com/2023/04/04/dining/milk-dairy-industry-gen-z.html

The Public Policy Institute of California has also noted, "More than half of young Californians (ages 24 and under) are Latino. Conversely, more than half of those 65 and older are white." https://www.ppic.org/publication/californias-population/
This would indicate that a good percentage of those living in California are *lactose normal.* A systemic review in *The Lancet* noted, "… lactose malabsorption is widespread in most of the world, with wide variation between different regions and an overall frequency of around two-thirds of the world's population." https://www.thelancet.com/journals/langas/article/PIIS2468-1253(17)30154-1/fulltext

Given the numerous health and environmental justice considerations it is clear that the Merced Dairy Biomethane Pilot Project which further incentivizes animal-based dairy production is not something that would be in the best interest of the people or future of California. Asking the community to cover the costs of a project that may be harming them is not reasonable.

3. Animals

It is impossible to ignore the inherent suffering of the cows involved in the dairy industry. Mother cows, who are pregnant for nine months, have their babies taken away from them, often immediately after birth while they are so disorientated that they do not fight back when they are separated. The mom and baby will bellow back and forth to each other in an effort to try to communicate.

The rest of their lives will be spent getting impregnated, having babies of their own and then having them taken away. This cycle will continue until their bodies are broken and then killed after, on average, a mere 3 to 4 years when exploited for their milk. Their natural lifespan should be 15 to 20 years. https://www.sciencedirect.com/science/article/pii/S1751731119003264

In California, the calves who can produce milk are often placed into confinement individually

either in hutches or in an igloo-type of confinement that prevents the calves from walking, and some are even chained at the neck. Sometimes the calves will tip over the water bucket and will die from thirst in the extreme heat of the Central Valley.*

California voters have overwhelmingly spoken in support of non-human animals: in 2008, 63% voted in favor of the Standards for Confining Farm [sic] Animals to prevent certain confinements of animals raised and killed for food, and the Prevention of Cruelty to Farm [sic] Animals Act also passed at 63%.

Additionally, as more and more people in the US are turning to plant-based milks such as oat and soy due to concerns about animal welfare, environmental impacts, and the climate crisis, it is backwards for a state like California to get stuck in the past.

It is also imperative that we never forget that many peoples around the globe have been consuming plant-based milk for centuries. As the *Smithsonian* article observes, “Unless the FDA can prove conclusively that nut milks cause rickets, for instance, consumers are poised to continue buying the nondairy milks they’ve been consuming for centuries.” https://www.smithsonianmag.com/history/nut-milks-are-milk-says-almost-every-culture-across-globe-180970008/

To sum up, F.E.P stands in opposition to requiring PG&E ratepayers to cover the unreasonable costs of the Merced biodigester pilot project, which bring the project’s cost to almost double what it was initially approved for. The developers and not the ratepayers should bear the burden of cost. In addition to finding the project cost unreasonable we have serious concerns about the use of methane biodigesters at dairy farms in California climate policy. Methane biodigesters increase harm to local people, the environment, and animals who are exploited within the dairy production system. In doing so they present issues of environmental injustice and this is not something that PG&E ratepayers should be asked to finance.

Sincerely,

lauren Ornelas
Founder & Senior Programs Director
Food Empowerment Project

Dr. Shaina Sadai
Climate scientist and climate justice advocate

*Per an investigation carried out by lauren Ornelas.