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*Comment Received From: Claire Warshaw
Submitted On: 7/1/2020
Docket Number: 19-SPPE-05*

2020_07_01 EMERGENCY BACKUP POWER SPPE concerns & suggestions from a public member

As a member of the public, a native Californian, who grew up in the 1970s smoggy San Fernando Valley prior to vehicle smog check mandates, who lived and worked in Santa Clara county during the late 1980s, and Santa Cruz county during the 1989 earthquake, and who worked as an Engineering Designer for the Sacramento Municipal Utility District, 2005-2015, I am concerned about the cumulative effects of emergency backup diesel generation design acceptance.

I am especially concerned about cumulative effects of emergency backup generation design having experienced and realized earthquake, and after reading about other emergency caused outages. Santa Clara is nearby to coastal range vegetation, which occasionally has wildfire emergency events. Further, Santa Clara county is subject potentially to Public Safety Power Outages, which became outage realities to many Californians in 2019. Per local news, residential customers purchased individual generators, most of which run on combustion fuel. Today, in my mailbox, I received a coupon for a "Home Standby Generator," by Champion Power Equipment; according to their website today, their residential generators can run on propane or one's home's natural gas system.

Per recent California Energy Commission (CEC) small power plant exemption (SPPE) process applicants, it seems if there were an outage emergency, that there might be substantial cumulative effects of one to six data center diesel backup generators plus nearby residential customer generators, and possibly wildfire smoke, depending on the emergency. I urge the stakeholders involved to realize that Santa Clara County has already developed intense appearing industrial areas, in recent decades, and borders residential communities that could be adversely affected by new polluting resources. The area looks extremely industrial and likely has few local residents who have the time and energy to attempt to interact publicly in their spare time, with the CEC on SPPE projects in their vicinity.

The six Santa Clara backup generation data center SPPE projects seem to have been submitted maximizing the power that can be produced (

Environmental analysis has seemingly determined that emergency data preparation possibilities are speculative. This is true. However, these are clearly "emergency" labeled design projects. Plus, it seems the world has experienced is that emergencies grow over time with intensity, possibly due to increasing population, with some bad acting people, possibly due to climate change due to increasing greenhouse gases including atmospheric ozone depletion, increasing heat, solar radiance and possibly other ideas (industrial space concepts and electromagnetic fields might become

hazards too). The 1989 Loma Prieta earthquake outage and more recent Santa Rosa Tubbs and related urban wildfires, could give reasonable data for forecasting possible emergency outage problems, if entities insist upon designing and accepting building emergency backup power for less critical assets.

It is of concern, from a x-SMUD Designer, that Silicon Valley Power representatives might be involved in design acceptance at their local jurisdiction. If there are dual employment interactions, Santa Clara residents might need advice on how to protect themselves from new projects, such as these.

Backup generation installs in 2020 might last a decade or more. I worked near a backup generator near SMUD buildings before 2013. More often than I ever expected our old 59th Street building, incurred an outage or was subject to emergency testing, prompting evacuation and deployment of a loud generator start, with a small cloud of emissions across the street from our office. A few lights would remain on as employees exited the building.

In these recent Santa Clara emergency backup data center projects, it is not one of these machines, but over 20 emergency backup generators in one project that are set to deploy in an emergency. With six projects, there would be six areas in one county deploying many diesel generators at one time. Though located in industrial areas, it seems that emergency operations with associated emissions, potentially could become more hazardous, e.g., driving on nearby freeways, than the emergencies which originally created an electrical outage.

In the last 3-4 years, I listened to utility, city and county representatives bring clean energy plans before the Commission. When these new Santa Clara data centers started to be submitted for small power plant exemptions, I wondered why they were designed to incorporate non-renewable diesel. Diesel has been known to be a dirty fuel which contributes to emissions and can cause substantial health problems. The plans obviously make no progress towards cleaner energy. Are persons designing forecasted stranded asset projects to appease the oil and gas industries? Did the Santa Clara 2019 hydrogen plant accident impede progress towards incorporating clean hydrogen fuel backup generation? Local community progress towards clean energy, and goals from climate legislation such as Senate Bills 350 and 100, started with applause at the Commission business meetings, but seemingly has not given necessary follow-up construction design people clean energy signals to proceed with. Local representatives now may need to take further measures to put their plans into reality, with their own people to further aid clean energy progress.

Building designers could be encouraged and then mandated to plan a second form of emergency backup generation. Part of the problems with design, as well as other processes, such as actual construction, is implementing change. (Note: I was not a building designer but took building and lot construction design plans to do my work at SMUD.) Change has not been the budget person's friend, so it seems with our conservative building industries. If building designers were mandated to provide plans

for an alternative backup generation replacement plan, even if the plan is for 5-10 years after construction is completed, then building designers might start learning new processes and also become more at ease. My suggestions are for stakeholders to encourage educational changes in the design process. For example; New backup fuel generators installed in 2020 or beyond needs to be run on 100% clean fuel if and when that clean renewable fuel becomes available. Make certain plan submittal to local jurisdictions has a plan to change to clean energy when the alternative is ready, as part of the budgeted building construction plan, adding another construction phase. Have building designers chose and evaluate a current preferred emergency clean energy backup generation research option with a plan for eventual replacement of diesel power.

As for the California Energy Commission, it was difficult to imagine supporting a given project, from a past SMUD employee's perspective, who worked in construction, if submitting persons changed their data substantially, as was suggested in at least one of these emergency backup data center projects. If project submitters suggested that a data building was probably going to use much less energy than suggested in original submitting documents, then that submitting entity ought to resubmit their data and the CEC ought to re-start the review process at time zero. Otherwise, public people might be hurt participating and evaluating CEC processes. In addition, I was surprised the CEC would sponsor doctors who would claim emissions from one of these individual projects was not a public health hazard; even if the most dangerous location of the project normally does not have a human, sometimes sabotaging events happen to people when opportunities like a distinct hazardous placement is available. It is unusual to imagine small diesel inhalations being realistic in terms of human health despite project emission small numbers. Further, at the end of a recent evidentiary hearing, listening to verbal shaming discipline spoken by a project lawyer, it seemed a robot would have been an appropriate suggestion for future CEC participating public audience members. To state that these projects had no public participation, other than registered project intervenor, is not looking relevant.

Additional submitted attachment is included below.

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Per recent California Energy Commission (CEC) small power plant exemption (SPPE) process applicants, it seems if there were an outage emergency, that there might be substantial cumulative effects of one to six data center diesel backup generators plus nearby residential customer generators, and possibly wildfire smoke, depending on the emergency. I urge the stakeholders involved to realize that Santa Clara County has already developed intense appearing industrial areas, in recent decades, and borders residential communities that could be adversely affected by new polluting resources. The area looks extremely industrial and likely has few local residents who have the time and energy to attempt to interact publicly in their spare time, with the CEC on SPPE projects in their vicinity.

The six Santa Clara backup generation data center SPPE projects seem to have been submitted maximizing the power that can be produced (<100 MW) under exemption. It almost appears that these projects could make a diesel power plant using separate buildings. Evaluation of this unique new project submittal situation needs a standardized cumulative threshold number to sum all six project emergency backup emissions plus nearby residential purchased backup generation emissions, with the additional possibility of smoke particulate matter. The Initial Study/Negative Mitigated Declaration document indicates measurement on one project at a time, shares high values of particulate matter size 10 in a recent year, and does not seem to prevent a large number of design projects to be installed in a vicinity which can potentially create power using backup generation design. If Santa Clara county and Silicon Valley Power want to indicate that its locality will rarely have emergencies as evaluated in the IS/MND, then it would probably help public and environmental health if officials insisted these new data centers be designed without emergency backup generation.

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*California Energy Commission Docket Comment RE: Six recently submitted Santa Clara County Data Center Emergency Backup Diesel Generator Projects for Small Power Plant Exemptions
Claire Warsaw, July 1, 2020, Page 1 of 3*

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