BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of: Rulemaking to Consider Modification of Regulations Establishing a Greenhouse Gases Emission Performance Standard For Baseload Generation of Local Publicly Owned Electric Utilities	Docket No. 12-OIR-1

REPLY COMMENTS OF THE CITY OF SANTA CLARA

The City of Santa Clara, appreciates the opportunity to offer these comments to the California Energy Commission (Commission or CEC) in response to the *Request for Reply Comments* (Request for Replies) issued by Chairman Weisenmiller on August 31, 2012, and to respond to the specific inquiries regarding whether to change the emissions performance standard (EPS) to carry out the requirements of Senate Bill (SB) 1368.

INTRODUCTION

Santa Clara limits these comments to addressing the specific inquires regarding the impacts of a lowered EPS on its facilities and its ability to utilize those facilities for the provision of renewable electricity into the State. Santa Clara supports the comments filed by the Northern California Power Agency (NCPA) and the M-S-R Public Power Agency (M-S-R). Santa Clara incorporates into these comments the legal, policy, and technical reasons why the Commission should neither adopt new notification and reporting requirements for all expenditures in non-EPS compliant facilities and why the EPS should not be changed as set forth in both the NCPA and M-S-R comments.

ABOUT SANTA CLARA

The City of Santa Clara has operated an electric utility for more than 100 years. A charter member of NCPA, Santa Clara strives to provide cost-effective electricity to its residents

and business, and to maintain a diverse portfolio of resources to meet the City's growing demand for electricity. Santa Clara has advanced its pursuit of a diverse electricity portfolio by becoming a lead partner in the 110-megawatt NCPA Geothermal Project, where Santa Clara holds a 55% participation share. Santa Clara was the first municipality in the United States to own and operate a plant of this nature. Today, the City of Santa Clara's municipal electric utility doing business as Silicon Valley Power, owns, operates or contracts for more than 2,700 megawatts (MW) of electric generating resources and serves a peak load of approximately 460 MW. The average electric bill in Santa Clara is almost half of those in surrounding communities and rates are expected to remain stable through 2013.

In recognition of the City's leadership in obtaining renewable energy resources, about 3,500 residents elect to purchase 100 percent Green Power, the voluntary renewable energy program from Silicon Valley Power that offers customers the option of one hundred percent renewable energy at some of the lowest rates in the nation. The average Santa Clara Green Power participant will prevent 7,310 pounds of CO_2 and harmful particulates from entering the atmosphere each year. The environmental and air quality benefits are equivalent to the carbon removed from the atmosphere annually by 0.707 acres of pine or fir forests, or not driving your car for half a year.

DETRIMENTAL IMPACT OF A REDUCED EPS

The Request for Replies asks parties to respond to the NRDC/Sierra Club recommendation that the EPS be lowered. All of the information provided by NRDC and Sierra Club is based on national data that does not take into account the specific impacts that such a change would have on California's ability to meet its overall renewable energy objectives.[1] Since the proposal is based on national – and not California-specific data – the CEC is seeking information regarding the implications of a reduced EPS on California facilities. Specifically, the Request for Replies (pp. 4-5) asks for the following:

> a. *"Given that the EPS applies to natural gas plants that are designed and intended to operate as baseload facilities, the Energy Commission seeks input on how many of California's natural gas fired power plants would be affected by a lower EPS, such as in the range NRDC & Sierra Club have suggested."*

[1] In addition to be based on national data sources, the majority of the information provided by NRDC and Sierra Club is taken from their filings in support of a Federal emissions standards. The proposed Federal standard is not comparable to the California EPS established pursuant to SB 1368.

b. *"Energy Commission is interested in receiving input on the extent to which a lower EPS may impact the design or ability of natural gas plants to operate more flexibly for integrating renewable resources, since the cycling of these plants entails lower efficiencies and requires fast ramp capabilities, and thereby a potential increase in emissions."*

Santa Clara provides the following assessment of how a proposed 825 or 850 pounds carbon dioxide per megawatt hour (lbs CO_2/MWh) EPS would impact its Donald Von Raesfeld (DVR) Power Plant.[2] Santa Clara brought the DVR power plant on line in 2005. DVR is a nominally rated 122 MW natural gas-fired, combined-cycle electric generating facility with the ability for peak firing up to 147 MW. DVR is a natural gas-fired, combined cycle, wet-cooled generating facility consisting of two General Electric LM-6000PC Sprint combustion turbine-generators (CTGs) and a single condensing steam turbine generator (STG). To control emissions of air pollutants, DVR has gas turbines with water injection to control oxides of nitrogen (NO_X) and the best available control technology (BACT) including selective catalytic reduction (SCR) for control of NOx.

DVR is a highly efficient, clean, combined cycle electricity generating station that has been in operation for less than 10 years. In 2011, using Cal-e-GGRT numbers, DVR reported 921 lbs CO2e/MWh. Accordingly, this new, efficient, and clean resource would be rendered non-EPS compliant under the NRDC-Sierra Club proposal.

DVR also plays a key role in balancing Santa Clara's load with its supply. Santa Clara has a robust renewable energy procurement strategy and has already achieved an RPS of over 25%. Electric generation resources need to be run both to react to changes in supply and changes in load. As DVR is located within the City, Santa Clara primarily operates it in such a way to react to changes in load. Therefore, at times it may necessarily run at a less than optimal rate, thereby increasing GHG emissions. Despite the increase in emissions when facilities such as DVR are used in such a manner, the overall impact on the State is positive, as it allows Santa Clara to achieve high reliability for its customers and for greener resources to reach California's businesses and residents in a more cost-effective manner.

[2] The scope of the data provided herein is necessarily limited due to the constrained time during which Santa Clara had to conduct its analysis. If the CEC were to embark on a full scale review of the EPS and move towards changing the standard, Santa Clara assumes that all stakeholders will have adequate time to conduct a review and analysis of relevant data to be presented as evidence to the Commission.

The Commission has asked whether the EPS should be changed to carry out the requirements of SB 1368 – Santa Clara believes that answer is an emphatic **'NO'**. SB 1368 required the Commission to develop an emission performance standard – in consultation with the California Public Utilities Commission (CPUC) and California Air Resources Board (CARB) – "at a rate of emissions of greenhouse gases that is no higher than the rate of emissions of greenhouse gases for combined-cycle natural gas baseload generation."[3] The Commission has done that. SB 1368 also references California's comprehensive plans to reduce greenhouse gas emissions and notes the State's policy to encourage the development of cost-effective, highly-efficient, and environmentally-sound supply resources to provide reliability and consistency with the State's energy priorities.[4] DVR is such a facility, and by all accounts, the very kind of natural gas resource that the State should be encouraging to supplement an increasing renewable energy portfolio and the State's overall energy priorities. Clearly, any change in the EPS that would render such a facility non-EPS compliant should be avoided.

Were DVR to be rendered non-EPS compliant, the reporting burden that would fall on Santa Clara to report all expenditures made on the facility would be extremely onerous. This would likely require an increase in staff, thereby increasing costs to Santa Clara's customers, with no environmental benefit. The alternative is to make very substantial capital investments in additional control technology to achieve an emissions rate that is just slightly lower than the current rate. In its July 27 Comments, NRDC and Sierra Club state that it is possible for California facilities to achieve this standard without added costs to customers "since the added capital cost of the more efficient designs is more than offset by the reductions in fuel cost."[5] This is simply not the case, as DVR would likely need a third combustion turbine to add more stream to the over-sized steam turbine to increase overall plant efficiency, and even this may not be sufficient to meet the proposed EPS standards. Onsite carbon sequestration might be needed to ensure a margin of compliance with the proposed EPS, which is far costlier than any fuel savings. Santa Clara has a state-of-the-art gas fired power plant that provides highly reliable power to its customers; to deem this plant non-EPS compliant is nonsensical and clearly not what was contemplated by the Legislature when they directed the CEC to adopt an EPS.

[3] Public Utilities Code section 8341(e)(1).

[4] SB 1368, section 1.

[5] NRDC/Sierra Club July 27 Comments, p. 6.

CONCLUSION

The current 1,100 lbs CO_2/MWh EPS meets the requirements of SB 1368. It was developed as part of a collaborative effort between numerous stakeholders and public agencies, and specifically takes into account the resource needs of California. It is also but one element of California's overall green-energy plan, and not the sole means by which the State will achieve the reduced GHG emissions and increased renewable energy procurement that it desires. Tightening the EPS will only cause increased costs to California's utilities and ratepayers, and will result in no net benefit to the environment.

Furthermore, as more fully explained in the comments of M-S-R and NCPA, there are also significant legal and public policy considerations that must also be taken into account prior to making any changes to the EPS. An analysis of each of these also supports leaving the EPS unchanged. Accordingly, Santa Clara urges the Commission to issue a decision finding that there is no need to change the EPS in order to meet the requirements of SB 1368.

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Respectfully submitted,

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