**SUPERIOR COURT OF CALIFORNIA**

**COUNTY OF SANTA CLARA**

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| BLOOM ENERGY CORPORATION, a Delaware corporation,<br><br>Petitioner and Plaintiff,<br><br>vs.<br><br>CITY OF SANTA CLARA, a municipal corporation; SILICON VALLEY POWER, a not-for-profit municipal electric utility; and DOES 1 through 10, inclusive,<br><br>Respondents and Defendants. | Case No. 19CV348838<br><br>**ORDER RE: PETITION FOR WRIT OF MANDATE AND COMPLAINT FOR DECLARATORY RELIEF** |

The above-entitled matter came on for hearing on Wednesday, December 18, 2019, at 9:00 a.m. in Department 5, the Honorable Thomas E. Kuhnle presiding. Having reviewed and considered the written submissions filed by the parties, and having listened carefully to arguments of counsel, the Court rules as follows:

## I. INTRODUCTION

Petitioner and Plaintiff Bloom Energy Corporation ("Bloom") manufactures and sells fuel cells. Fuel cells generate electricity through electrochemical reactions. (Administrative Record ("AR") 16436.) Fuel cells are used by technology companies and institutional facilities,

including data centers, hospitals and universities. (AR 173, 181, 9579.) Once installed, fuel cells operate for 15-20 years. Bloom's fuel cells run on biogas and natural gas. Fuel cells that run on biogas are carbon neutral. Fuel cells that run on natural gas ("NG Fuel Cells") emit greenhouse gases ("GHGs") and other pollutants.

On May 7, 2019, the City Council of Respondent and Defendant the City of Santa Clara (the "City") passed and adopted Resolution No. 19-8701 (the "Resolution"). (AR 49-51.) The City began considering issues relating to the Resolution in April 2019. (AR 16453-55.) On May 2, 2019, the City published a draft of the Resolution. (AR 83-91, 287.) The Resolution provides that self-generating energy facilities, including those using fuel cells, must meet the criteria for renewable electrical generation facilities, which are defined in the Public Resources Code. The parties agree the Resolution will prevent installation of new NG Fuel Cells.

The City adopted the Resolution with little analysis of possible environmental effects. (AR 87 [the "Environmental Review" section of the Report to Council].) Bloom argues the failure to conduct a more thorough analysis violates the California Environmental Quality Act ("CEQA"). The City argues no such analysis is required because the Resolution falls under CEQA's "common sense" exemption. The common sense exemption applies to projects that have no possible significant effects on the environment. Bloom contends the Resolution may have significant effects on the environment because sources of replacement power generate more GHGs and pollutants than NG Fuel Cells.

## II. REQUEST FOR JUDICIAL NOTICE

On September 17, 2019, the City certified the Administrative Record of Proceedings. The City affirmed "[t]he administrative record in this case contains documents Bates stamped numbers 000001 through 022397, and includes all of the documents, transcripts, and e-mails in the City's files that are properly to be included in the record (except for any pages identified as duplicates)." At no time has any party filed a motion to augment the record.

On October 4, 2019, Bloom filed a request for judicial notice of a document describing the Sequoia Data Center, dated August 12, 2019, that was posted on the California Energy Commission website. On December 10, 2019, Bloom filed a conditional request for judicial

notice of two additional documents: (1) an article from Biomass Magazine, titled "A Trending On-Site Power Option," dated September 23, 2015; and (2) an excerpt from a report from the California Council on Science and Technology, titled "Long-Term Viability of Underground Natural Gas Storage in California," dated January 2018.

On November 19, 2019, the City filed a request for judicial notice of three documents: (1) Silicon Valley Power's 2018 Integrated Resource Plan, dated November 12, 2018; (2) City Council Meeting Minutes, dated November 27, 2018; and (3) an article appearing in the Los Angeles Times titled "IKEA's plans to generate on-site power hit a snag," dated May 1, 2015.

Both Bloom and the City argue judicial notice is proper under Evidence Code section 452, subdivisions (c) and (h). All three requests for judicial notice are contested.

In administrative mandamus actions, parties are limited to evidence in the administrative record. (Code Civ. Proc. § 1094.5, subd. (c); *Porterville Citizens for Responsible Hillside Dev't v. City of Porterville* (2007) 157 Cal.App.4th 885, 896-97; *Moore v. City of Los Angeles* (2007) 156 Cal.App.4th 373, 386.) Extra-record evidence is admissible "only in those rare instances in which (1) the evidence in question existed *before* the agency made its decision, and (2) it was not possible in the exercise of reasonable diligence to present this evidence to the agency *before* the decision was made so that it could be considered and included in the administrative record." (*Western States Petroleum Assn. v. Superior Court* (1995) 9 Cal.4th 559, 578 [emphasis in original].) If the moving party fails to carry its burden, the extra-record evidence must be excluded. (*Pomona Valley Hosp. Medical Center v. Superior Court* (1997) 55 Cal.App.4th 93, 102.)

Here, Bloom's first request is DENIED because the extra-record evidence did not exist before the City made its decision. Bloom's second conditional request and the City's request are also DENIED. Both parties had access to the documents for which they seek judicial notice prior to adopting the Resolution, but did not provide them to the City Council prior to the adoption of the Resolution, and neither party filed a motion to augment the Administrative Record.

## III. RESOLUTION NO. 19-8701

The City owns and operates Respondent and Defendant Silicon Valley Power ("SVP"), a full-service power utility owned by the City with power plants, transmission lines, and distribution infrastructure. (AR 49, 83.) The Resolution amends SVP's Rules and Regulations. It provides that self-generation energy facilities[1] cannot connect to its grid unless they meet "the state criteria for renewable electrical generation facilities for the purpose of limiting greenhouse gas emissions in the City." The amended Rules and Regulations became effective and operative on June 1, 2019.

The Resolution therefore requires that self-generation facilities generate power using "biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation of 30 megawatts or less, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and any additions or enhancements to the facility using that technology." (Pub. Res. Code § 25741, subd. (a)(1).) Fuel cells are self-generating facilities. The Resolution applies to fuel cells, and therefore newly-installed fuel cells must rely on renewable fuel sources and not natural gas.

The Resolution applies only to self-generation facilities modified or installed after the Resolution was adopted. (AR 86.) It does not apply to back-up generators. (AR 84.) On May 7, 2019, the City Council adopted the Resolution by a unanimous vote. (AR 51.) On May 8, 2019, the City issued a Notice of Exemption. (AR 48.) The Notice of Exemption states the Resolution is exempt from CEQA pursuant to CEQA Guidelines section 15061, subdivision (b)(3).[2] The Notice of Exemption states, "Amendments to the agency rules and regulations do not have the possibility of having a significant effect on the environment. . . ." (*Ibid.*) The Report to Council includes similar conclusory language. (AR 87.)

## IV. FACTS FROM THE ADMINISTRATIVE RECORD

Bloom and the City disagree about the effects the Resolution will have on the environment. They share, however, a common starting point in their analyses. Both agree that

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[1] Self-generation facilities are private electrical generation systems that an electrical customer installs on its own property for its own use. (AR 84.)

[2] References to the "Guidelines" is shorthand for sections of Cal. Code Regs. tit. 14, div. 6, ch. 3.

the resolution will prevent installation of new NG Fuel Cells. Going forward, this means SVP will need to generate power to replace the power that NG Fuel Cells would otherwise be generating. Bloom argues the power distributed by SVP will result in emissions of GHGs and other pollutants that are greater than if the Resolution were not adopted. The City argues that the opposite is true. It contends the power distributed by SVP is quickly becoming cleaner, and even today its power will have fewer effects on the environment than NG Fuel Cells. The key facts cited to support the arguments made by both sides are set forth below.

**A. Bloom's Citations to the Administrative Record**

**1. Ramboll's Report**

Bloom submitted written comments to the City Council dated May 6, 2019. (AR 16416-29.) Attached to its comments was an analysis by Ramboll of the potential effects on the environment that would be caused by the Resolution. Ramboll is an international consulting company with expertise in environmental and health projects. The authors of the Ramboll report are well-credentialed and experienced. (AR 16431-34.)

The analyses and calculations in the Ramboll report indicate the Resolution will increase emissions and worsen air quality. (AR 16426-27.) The Ramboll report states the Resolution will likely increase GHG emissions and pollutants. (AR 16416.) In particular, the Ramboll report states that the Resolution:

> introduces various potentially significant environmental impacts. Based on [Ramboll's] review of the limited technical information in the City's record for this resolution, the technical evidence indicates that the selective requirement imposed in the resolution has the potential to cause significant environmental impacts from the increase in air quality pollutants, greenhouse gas emissions, and other environmental variables. The resolution introduces the likelihood that power demand is addressed by different power generation sources that are not powered by renewable fuel sources.

(AR 16425.)

SVP operates three natural gas power plants. The Ramboll report compares emissions per unit of power generated by the Donald Van Raesfeld natural gas power plant ("DVR Plant") with Bloom's NG Fuel Cells. (AR 16426.) The Ramboll report concludes that the Resolution would lead to: (1) potentially significant increases in oxides of nitrogen ("NOx"), oxides of

sulfur ("SOx"), and other pollutants; (2) potentially significant increases in GHG emissions; (3) a significant possibility of local health impacts as a result of increased NOx and other emissions; (4) potentially significant impacts on hydrology and water; and (5) potentially significant noise impacts on sensitive receptors, including the sensitive receptors located in disadvantaged communities and residential neighborhoods. (AR 16426-29.)

**2. Evidence Relating to Diesel Generators**

Bloom cites information in the record provided by Equinix, a company based in Redwood City which provides data centers and related products. (AR 141-42.) Equinix states that if NG Fuel Cells cannot be installed, certain businesses will need to have backup power sources. The Resolution specifically excludes back-up generators. So if NG Fuel Cells are not available, Equinix states that businesses will rely more heavily on diesel generators. (AR 141.) Equinix also expressed concern over the use of SVP's three natural gas power plants that emit NOx, SOx, and volatile organic compounds ("VOCs"). (*Ibid.*) At the hearing on the Resolution, the Director of Mechanical Engineering for Equinix, Suresh Pichai, warned again that the Resolution would increase reliance on "dirty diesel generators" because without NG Fuel Cells they are the only feasible option for backup power. (AR 195-96.)

The Silicon Valley Leadership Group urged the City to reconsider the Resolution because "restricting onsite power generation options entrenches dirty diesel generators as the only option for backup power requirements – an outcome that runs counter to the Bay Area Air Quality Management District's goal to be diesel-free by 2033." (AR 1351.) Bloom's representatives also argued that NG Fuel Cells can replace diesel generators and thus greatly reduce GHG emissions. (AR 209.)

**3. Other Citations to the Record**

Bloom highlights the City's own statements made in connection with the Resolution. The City's acting Chief Electric Utility Officer stated that a factual dispute existed over the impact of the Resolution and that "experts can differ on analysis when it comes to that for a number of reasons." (AR 154.) He said, "Certainly I think we can differ on data, we can differ on the analysis." (AR 220; see also AR 16446.) He also said "we [ran] the number[s] as well,

and some [are] higher and some are lower. I'm not going to go through all those numbers, but in some cases you can see that a Bloom natural fuel cell, it's a little higher; in some cases you can see that it's a little lower." (AR 155, see also 16361.) In addition, he told the City Council that "we're not fully aligning with their analysis, and that's okay." (AR 154.)

City staff prepared a short presentation to the City Council. (AR 16358-64.) Staff agreed that it would be "more appropriate" to compare fuel cells to the DVR Plant, and agreed that the DVR Plant would increase the NOx and SOx emissions, and lower the carbon[3] and VOC emissions as compared to NG Fuel Cells. (AR 16361.)

WattTime is a nonprofit that claims to be a "global leader and expert in marginal emissions data." (AR 186.) Its representative, Christy Lewis, stated at the hearing that marginal emissions must be considered in evaluating the effect on the environment. As an example, just a few days before the hearing the *average* rate of emissions for the California Independent System Operator grid was 283 pounds of carbon dioxide ("$CO_2$") per MWh, while the *marginal* rate of emissions was 927 pounds of $CO_2$ per MWh, which is far higher than the $CO_2$ produced by NG Fuel Cells. (AR 187-88.)

Bloom also cites the expert opinions of James Sweeney, Ph.D, and Catherine Sandoval, who both conclude that biogas is prohibitively expensive and thus infeasible for fuel cell use. (AR 16411-14.)

**B. The City's Citations to the Administrative Record**

The City begins by providing information about the sources of the power distributed by SVP. The City adopted a Climate Action Plan in 2013 and since then has been working hard to meet its objectives, including reducing GHG emissions. SVP has diversified its sources of power to rely more heavily on hydroelectric, wind, geothermal, landfill gas, solar, and biogas sources. (AR 16362-63.) Between 2013 and 2017, SVP's reliance on natural gas has fallen from nearly 45 percent of its energy portfolio to 16 percent. (AR 16361, 17277-78.) In that same timeframe, SVP's reliance on renewable and GHG-free energy increased significantly to

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[3] The parties reference a number of GHG proxies, including carbon, carbon monoxide, and carbon dioxide equivalents ("CO2e"). Some of these measurements are based on pounds per megawatt hour. The Court has tried to make only apples-to-apples comparisons.

36 percent renewable, of which 72 percent is GHG-free. (AR 152-153, 9740, 17278.)[4] SVP has also achieved 100 percent carbon-free energy for residential customers. (AR 17277.)

The City states that Bloom's NG Fuel Cells use natural gas, and therefore the power they produce is neither renewable nor GHG-free. (AR 85, 137, 153.) The City also states that on a per unit basis, Bloom's fuel cells emit twice as much GHG as the average emissions of SVP's energy portfolio. (AR 137, 9683.)

The City also states that Bloom overstates the efficiency of its NG Fuel Cells. The City states that Bloom claims NG Fuel Cells' average emission factor for carbon dioxide equivalents ("$CO_2e$") is 756. (AR 16428 [noting that the $CO_2e$ measure is primarily based on carbon dioxide emissions; that methane and other GHGs account for less than one percent of the total].) The City cites other sources, some of which are not reliable, showing the $CO_2e$ is higher. (AR 1156, 1174, 11364, 17433.)

In addition, the City points out that unlike SVP's electrical grid, NG Fuel Cells cannot ramp up or down, but rather run continuously 24 hours a day, 365 days a year, constantly emitting GHGs. (See AR 85, 1150.) Because NG Fuel Cells – once installed – typically operate for 15-20 years, their dependence on natural gas is generally locked in on a continuous basis for well over a decade. (AR 217.)

Finally, the City cites materials showing NG Fuel Cells produce NOx, $CO_2$, VOCs, and hazardous solid waste. (AR 155, 1156, 1172, 11361, 11364.)

## V. APPLICABLE LAW

### A. The Common Sense Exemption

The City relies on CEQA's common sense exemption to explain why it did not study the potential environmental effects of the Resolution. The common sense exemption applies "[w]here it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment. . . ." (Guidelines § 15061, subd. (b)(3).)

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[4] The City explains that under California law, hydroelectric facilities larger than 30 megawatts do not qualify as renewable energy. (Public Resources Code, § 25741, subd. (a)(1).) However, those hydroelectric facilities are characterized as GHG-free. (See AR 16359.) The City states that SVP's use of hydroelectric power accounts for the difference in percentage between its renewable and GHG-free portfolio. (Respondents' Opposition Brief, at p. 9, n.2.)

Significant effects include direct physical changes and reasonably foreseeable indirect changes in the environment. (*Id.* § 15064, subd. (d).) "[A] 'reasonably foreseeable' indirect physical change is one that the activity is capable, at least in theory, of causing." (*Union of Medical Marijuana Patients, Inc. v. City of San Diego* (2019) 7 Ca1.5th 1171, 1197.) If an agency properly finds a project is exempt from CEQA, no further environmental review is required.

**B. Standard of Review**

The parties disagree over which standard of review applies to the determination by the City that the common sense exemption applies. To support their positions, both sides present thorough analyses of the law. Bloom argues a strict standard of review applies. Citing *Davidon Homes v. City of San Jose* (1997) 54 Cal.App.4th 106 ("*Davidon Homes*"), and numerous other cases, Bloom argues that a challenger need only make a "slight" showing of potentially significant environmental impacts to defeat the exemption unless the agency proves with certainty there is no possibility that the activity in question may have a significant effect on the environment. (Petitioner's Reply Brief, at p. 7.) Indeed, *Davidon Homes* states "that if a reasonable argument is made to suggest a possibility that a project will cause a significant environmental impact, the agency must refute that claim *to a certainty* before finding that the exemption applies." (*Davidon Homes, supra,* 54 Cal.App.4th at p. 118 [emphasis in original].) Of course, "the agency's exemption determination must be supported by evidence in the record. . . ." (*Id.* at p. 117.)

The City, on the other hand, relies heavily on *Muzzy Ranch Co. v. Solano County Airport Land Use Comm'n* (2007) 41 Cal.4th 372 ("*Muzzy Ranch*"), in arguing the more deferential "substantial evidence" standard of review applies. (Respondents' Opposition Brief, at pp. 13-15.) In *Muzzy Ranch,* a property owner alleged that CEQA required an agency to prepare an environmental impact report after it adopted a land use compatibility plan for an area near an Air Force base. Like a general use plan, it set forth policies and criteria to determine the compatibility of future development with the Air Force base's activities and mission. The California Supreme Court concluded the plan constituted a "project" subject to CEQA, but that the common sense exemption applied.

The relevant portion of *Muzzy Ranch's* analysis begins by stating: "The [common sense] exemption can be relied on only if a factual evaluation of the agency's proposed activity reveals that it applies." (*Muzzy Ranch, supra,* 41 Cal.4th at p. 386.) Thus, "whether a particular activity qualifies for the common sense exemption presents an issue of fact [and] the agency invoking the exemption has the burden of demonstrating it applies. (*Ibid.*) In other words, it is up to an agency to provide such factual support. (*Id.* at p. 387 ("[T]he Commission had the burden to elucidate the facts that justified its invocation of CEQA's common sense exemption.") After analyzing cases involving general plans and zoning, and noting the land use compatibility plan "simply incorporates existing general plan and zoning law restrictions," the Supreme Court concluded the plan at issue "falls within the common sense exemption." (*Id.* at 389.)

Nowhere does *Muzzy Ranch* announce the standard of review that applies to the common sense exemption. As the City has argued, however, the focus on "facts" and "evidence" on which an agency must rely in meeting its burden of proof implicitly suggests the substantial evidence standard of review applies. The Court agrees. However, the Guidelines impose a stringent test. An agency has the burden of showing that substantial evidence supports the finding that there is "no possibility that the activity in question may have a significant effect on the environment." (Guidelines § 15061, subd. (b)(3).)

**C. Substantial Evidence**

The Guidelines define substantial evidence as:

> [E]nough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached. Whether a fair argument can be made that the project may have a significant effect on the environment is to be determined by examining the whole record before the lead agency.

(Guidelines § 15384, subd. (a).) Likewise, "substantial evidence shall include facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts. (*Id.* § 15384, subd. (b).) Substantial evidence is not "[a]rgument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment." (*Id.* § 15384, subd. (a).)

The Court has carefully assessed whether materials in the record are based on "facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts," or instead "argument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate." The Court cites three sources of substantial evidence a number of times: the Ramboll report (AR 16425-29), comments made at the City Council meeting by the acting Chief Electric Utility Officer, and the staff presentation to the City Council. (AR 16358-64.) The Court also cites other sources of substantial evidence, including comments by experts and other knowledgeable persons. Citations to unsubstantiated diatribes written by third parties were largely ignored.

**D. Applying the Substantial Evidence Standard of Review**

The substantial evidence standard of review is deferential. An agency has the discretion to resolve questions of fact and to make policy decisions. (*California Native Plant Soc'y v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 984 [citing *Save Our Peninsula Committee v. Monterey County Bd. of Supervisors* (2001) 87 Cal.App.4th 99, 129].) A reviewing court cannot reweigh evidence. All it can do is determine whether the record contains relevant information that a reasonable mind might accept as sufficient to support the conclusion reached. This includes the choice of methodology. (*Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 514 ["a decision to use a particular methodology and reject another is amenable to substantial evidence review."].) All reasonable doubts must be resolved in favor of the agency's determination, and the court may not set aside the agency's decision even if the opposite conclusion is more reasonable. (See, e.g., *Western States Petroleum Assn. v. Superior Court, supra,* 9 Cal.4th at p. 572.) Thus, it is not up to the court to decide who has the better argument. (See, e.g., *Laurel Heights Improvement Assn. v. Regents of the University of California* (1988) 47 Cal.3d 376, 393 ["A court may not set aside an agency's approval of an EIR on the ground that an opposite conclusion would have been equally or more reasonable."].)

**E. Case Law**

As noted above, the California Supreme Court concluded in *Muzzy Ranch* that the common sense exemption applied when the land use compatibility plan simply incorporated

existing general plan and zoning law restrictions. Other cases, too, have upheld the application of the common sense exemption. In *CREED-21 v. City of San Diego,* 234 Cal.App.4th 488, for example, an agency assessed whether emergency storm drainage repair and revegetation projects were exempt from CEQA. The court of appeal concluded the emergency repair work fell within an "emergency project" exemption, and the revegetation work fell under the common sense exemption. (*Id.* at pp. 511-13.)

Other cases have concluded the common sense exemption does not apply. In *Dunn-Edwards Corp. v. Bay Area Quality Mgmt. Dist.* (1992) 9 Cal.App.4th 644, the Court considered regulations tightening emissions standards for VOCs in architectural coatings (e.g., paint). While it would seem that limiting VOC emissions would improve environmental quality, the court of appeal stated "there is evidence that the new regulations require lower quality products. As a result, more product will be used, which will lead to a net increase in VOC emissions." (*Id.* at 658.) The court concluded the regulations were not subject to the common sense exemption.

Three other cases are relevant. While they do not address whether the common sense exemption applies, they concern actions that on their face, like the Resolution at issue here, appear to improve environmental quality. In *Wildlife Alive v. Chickering* (1976) 18 Cal.3d 190, the Fish and Game Commission planned to revoke hunting permits for black bear. The Supreme Court concluded the setting of hunting and fishing regulations had the potential for a significant environmental impact, which was both favorable and unfavorable. It stated: "When the impact may be either adverse or beneficial, it is particularly appropriate to apply CEQA which is carefully conceived for the purpose of increasing the likelihood that the environmental effects will be beneficial rather than adverse." (*Id.* at p. 206.)

In *California Unions for Reliable Energy v. Mojave Desert Air Quality Mgmt. Dist.* (2009) 178 Cal.App.4th 1225, the agency issued a rule intended to benefit the environment by reducing dust emissions. It did not conduct any environmental analysis; instead, it relied on an exemption set forth in section 15308 of the Guidelines. The court of appeal concluded that

because the new rule would encourage additional road paving, it was not exempt and additional environmental analysis would need to take place. (*Id.* at pp. 1246-47.)

Finally, in *Building Code Action v. Energy Resources Conserv. & Dev. Comm'n* (1980) 102 Cal.App.3d 577, an agency adopted an energy-efficient double-glazing standard for windows used in new residential construction. Approval of the regulations was found to be invalid because "they raised 'a distinct possibility' of environmental impact by reason of the necessity for greatly expanded glass production." (*Id.* at p. 584.)

## VI. DISCUSSION

The parties do not disagree on everything. They agree NG Fuel Cells would be installed in Santa Clara after June 1, 2019 but for the Resolution. (See, e.g., AR 10064, 10768, 11122-23.) They agree that NG Fuel Cells emit GHGs and other pollutants. They also agree the generation of power that SVP distributes to City customers results in emissions of GHGs and other pollutants. There are, however, significant disagreements, which generally fall into three categories: (1) $CO_2e$ emissions; (2) NOx and SOx emissions; and (3) the use of diesel generators. These issues are discussed below.

### A. The Resolution's Effect on Carbon Dioxide Emissions

At a high level of abstraction, the parties' dispute concerning $CO_2e$ emissions hinges on whether the Resolution's effect on the environment should be measured by comparing $CO_2e$ emissions of NG Fuel Cells to: (1) *marginal* per-unit $CO_2e$ emissions from SVP's natural gas power plants; or (2) *average* per-unit $CO_2e$ emissions from SVP's energy portfolio.

The Ramboll report states that the average emission factor for $CO_2e$ for the DVR Plant in 2016 and 2017 was 950. (AR 16428.) It states further that the average $CO_2e$ emissions for NG Fuel Cells is 756. (*Ibid.*) Consequently, Bloom argues that if the DVR Plant by itself makes up for the power that would have been produced by NG Fuel Cells, the City's marginal $CO_2e$ emissions would greatly exceed $CO_2e$ emissions from NG Fuel Cells.

The City argues, however, that Bloom is making an unfair comparison. It notes that the DVR Plant (plus two other less efficient natural gas plants) accounted for only 16 percent of SVP's power in 2016. (AR 16361.) If you take into account its entire energy portfolio, the City

argues, the $CO_2e$ emissions from the DVR Plant total 152 (950 x 16%) – which is approximately one-third of the NG Fuel Cell emissions. The City presents its own data that shows average $CO_2e$ emissions for the SVP energy portfolio are approximately half of those from NG Fuel Cells. (AR 16363.) Based on these data, the City argues that preventing the installation of new NG Fuel Cells will reduce $CO_2e$ emissions.

Under the substantial evidence standard of review, the Court must accept "relevant information that a reasonable mind might accept as sufficient to support the conclusion reached. All conflicts in the evidence are resolved in support of the agency's action and we indulge all reasonable inferences to support the agency's findings, if possible." (*Great Oaks Water Co. v. Santa Clara Valley Water Dist.* (2009) 170 Cal.App.4th 956, 968.) The Court finds the City's analysis of average $CO_2e$ emissions is reasonable and supports the conclusion reached. The parties disagree about whether marginal or average $CO_2e$ emissions are the proper measure. Under the substantial evidence standard of review, the Court must accept the City's methodology. (*Sierra Club v. County of Fresno, supra,* 6 Cal.5th at p. 514.) Therefore, with respect to $CO_2e$ emissions, the City has met its burden of showing that substantial evidence supports the finding that there is no possibility that the activity in question may have a significant effect on the environment.

**B. Emissions of Oxides of Nitrogen and Sulfur**

Bloom argues the Resolution will cause air pollutants to increase above current baseline conditions. The Ramboll report states that NOx and SOx emission factors for the DVR Plant are higher than NG Fuel Cells. (AR 16426.) The DVR Plant emitted an average of 2.06 tons of SOx each year in 2016 and 2017. The Ramboll report states that NG Fuel Cells do not produce SOx. The Ramboll report also states that DVR Plant's average NOx emission factor in 2016 and 2017 was 0.049, while the emission factor for NG Fuel Cells was 0.0017. (AR 16426.) The Ramboll report concludes that higher NOx and SOx emissions caused by the Resolution will adversely affect air quality (especially ozone levels) and public health. (AR 16427.)

The City agrees that the DVR Plant is a "more appropriate comparison" to NG Fuel Cells, as long as the comparison takes into account the fact that in 2016 "only 16% of SVP

power was natural gas." (AR 16361.) The City agrees that with respect to air emissions "some are higher, others lower." (*Ibid.*) The City agrees the DVR Plant emits SOx and NG Fuel Cells do not. (*Ibid.*) The City also agrees that NG Fuel Cells have lower NOx emissions. (*Ibid.*) This is true even after taking into account that only 16% of SVP power comes from natural gas.[5] In sum, the City's own analysis confirms the Resolution may cause NOx and SOx emissions to increase above existing conditions. There is substantial evidence that these increased emissions are reasonably foreseeable. (Guidelines § 15064, subd. (d)(3).)

The Ramboll report points out that the Resolution may cause the DVR Plant's operations to adversely affect health and water quality, and increase noise. (AR 16427-29.) The City does not address these additional issues. This is significant because here the City "was unable to produce evidence of no adverse impact [and therefore it] cannot say with certainty 'there is no possibility that the activity in question may have a significant effect on the environment.'" (*Dunn-Edwards Corp. v. Bay Area Quality Mgmt. Dist., supra,* 9 Cal.App.4th at p. 658.)

The City argues its rapidly decreasing reliance on power generation facilities that emit GHGs, including the DVR Plant, will reduce harmful emissions over time. This may be true, but the common sense exemption is directed at the "the activity in question," which here is the adoption of the Resolution, not the City's broader, pre-existing efforts to reduce reliance on non-renewable power generation. The City also argues that the Resolution will increase demand for renewable self-generation projects. (Respondent's Opposition Brief, at p. 27.) The City, however, does cite any evidence to support its argument other than the fact that one such self-generation project exists. (AR 9604-05.)

The City also finds fault with Bloom's arguments more generally. It articulates Bloom's chain of logic:

> Bloom will not be able to develop future fuel cells in the City and that, if Bloom does not develop future fuel cells in the City, then SVP will be required to increase production at its natural gas power plants in the future and such future increases in production at SVP's natural gas power plants would result in a

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[5] The City reports that NOx emissions from NG Fuel Cells are 0.0017. (AR 16361.) The City reports that NOx emissions from the DVR Plant are 0.045. When the DVR Plant emissions are multiplied by 16 percent, they total 0.00784. This is more than four times higher than the NOx emissions from NG Fuel Cells.

> greater environmental impact than Bloom's potential operation of additional natural gas fuel cells in the City in the future.

(Respondent's Opposition Brief, at p. 18.) The City argues this theory is based on "speculative and unreasonable assumptions." (*Ibid.*) The Court disagrees. The City says again and again that the purpose of the Resolution is to stop installation of NG Fuel Cells so SVP's power is more sustainable. The City thus agrees that the Resolution will eliminate installation of new NG Fuel Cells that otherwise would have been installed. As noted above, the City agrees the DVR Plant is a "more appropriate comparison" to NG Fuel Cells. (AR 16361.) The City also agrees that NG Fuel Cells produce lower NOx and SOx emissions than the DVR Plant. (AR 16361.) And the City does not squarely address related health, water quality, and noise impacts.

Based on the evidence set forth in the record, the Court finds the data presented in the Ramboll report, coupled with the City's own presentation of similar data, demonstrates the Resolution may result in greater NOx and SOx emissions from the DVR Plant and therefore may have a significant effect on the environment. The Court also finds potential health, water quality and noise impacts caused by the DVR Plant may have a significant effect on the environment.

Therefore, with respect to NOx and SOx emissions, and potential health, water quality and noise impacts, the City has not met its burden of showing that substantial evidence supports the finding that there is no possibility that the activity in question may have a significant effect on the environment.

**C. Emissions from Diesel Generators**

NG Fuel Cells generate power even if SVP's grid fails. The Resolution specifically excludes back-up generators from its requirements. Consequently, while self-generating facilities (including fuel cells) must be powered by renewable fuel sources, backup generators do not. Instead, they are permitted to use non-renewable fuel sources, including diesel. Bloom argues that without new NG Fuel Cells, companies will have little choice but to install diesel generators to meet their emergency power needs. Diesel generators, Bloom asserts, will cause air pollution and harm sensitive receptors above existing conditions, and thus affect the environment.

There is substantial evidence in the record that supports these assertions. At the hearing on the Resolution, the Director of Mechanical Engineering for Equinix, Suresh Pichai, warned again that the Resolution would increase reliance on "dirty diesel generators" because without NG Fuel Cells they are the only feasible option for backup power. (AR 196; see also AR 141.) Bloom's representatives too argued that NG Fuel Cells can replace diesel generators and thus greatly reduce GHG emissions. (AR 209.) In addition, the Silicon Valley Leadership Group urged the City to reconsider the Resolution because "restricting onsite power generation options entrenches dirty diesel generators as the only option for backup power requirements – an outcome that runs counter to the Bay Area Air Quality Management District's goal to be diesel-free by 2033." (AR 1351.) The Court finds there is substantial evidence that emissions from diesel generators caused by adoption of the Resolution are reasonably foreseeable and would exceed current baseline conditions. (Guidelines § 15064, subd. (d)(3).)

The City does not cite to any substantial evidence to refute the evidence cited by Bloom. At the hearing, however, the City argued that SVP grid failures are rare and so the increase in diesel emissions will be negligible. Maybe so. But these facts are not part of the record.

Therefore, with respect to emissions from diesel generators, the City has not met its burden of showing that substantial evidence supports the finding that there is no possibility that the activity in question may have a significant effect on the environment.

* * * * * *

The evidence in the record, viewed under the substantial evidence standard of review, does not support Bloom's contention that the Resolution may impact the environment by increasing $CO_2e$ emissions. The evidence does, however, support Bloom's contentions that the Resolution may impact the environment by causing NOx and SOx emissions and related health, water quality, and noise impacts to increase, and by increasing reliance on diesel generators.

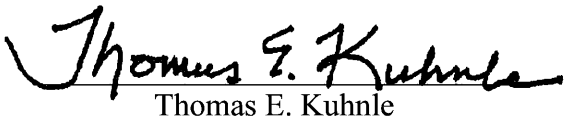
## VII. CONCLUSION

Under the substantial evidence standard of review, the Court finds the City has not met its burden of showing that substantial evidence supports the finding that there is no possibility that

approval of the Resolution – the activity in question – may have a significant effect on the environment. The Court thus GRANTS the writ of mandamus.

The Court ORDERS that on or before January 17, 2020, Bloom shall prepare and submit to the City two separate documents: (1) a proposed form of judgment granting the writ of mandamus; and (2) a proposed form of the writ of administrative mandamus. If the City has objections to the proposed judgment or the proposed writ, the parties shall meet and confer on or before January 24, 2020 to try to resolve their differences. If the parties are unable to reach agreement, Bloom shall file a form of judgment and form of writ of mandamus along with the City's written objections on or before January 31, 2020. A courtesy copy should be delivered to Department 75.

Dated: January 9, 2020



Thomas E. Kuhnle
Judge of the Superior Court