City of Santa Clara
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City Attorney's Office

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Howard "Chip" Wilkins, Esq.
Remy Moose Manley LLP
555 Capitol Mall, Suite 800
Sacramento, CA 95814

via email only cwilkins@rmmenvirolaw.com

Subject: Proposed Bloom Fuel Cell Power System Projects at the Intel, Inc., and Equinix, Inc., Facilities in the City of Santa Clara

Dear Mr. Wilkins:

This letter is in response to your letter addressed to me dated September 24, 2020 (Bloom's Letter), which included two CEQA Class 29 Categorical Exemption Memoranda (Bloom's Exemption Memos) dated the same. Bloom's Letter asserts that the 2.5 megawatt (MW) fuel cell power system (Equinix Project) that Bloom proposes to install at 2960 and 2970/3000 Corvin Drive (Equinix Facility) and the 10.5 MW system (Intel Project) that Bloom proposes to install at 2200 Mission College Boulevard (Intel Facility) (collectively, the "proposed Projects") do not require use permits. Bloom's Exemption Memos further assert that the proposed Projects are exempt from California Environmental Quality Act (CEQA) review.

As explained further below, the proposed Equinix and Intel Projects require use permits pursuant to the Santa Clara City Code (City Code). The City informed Bloom of this fact over six months ago. Nevertheless, to date, a use permit application has not been submitted for either the proposed Equinix or Intel Projects.

With respect to CEQA, City staff will not make a final recommendation regarding the proper scope of CEQA review for these Projects until after complete use permit applications have been submitted to the City for review. However, as discussed below, based on City staff's review of Bloom's Letter and attachments, City staff does not anticipate that the proposed Projects will qualify for the CEQA exemptions identified in Bloom's Exemption Memos.

DISCUSSION

1. The proposed Projects constitute Electric Power Plants pursuant to the City Code.

In Bloom's Letter, Bloom states that City Code section 18.06.010(e)(1), which defines "electrical power plants", is clear and unambiguous. (Bloom's Letter, pp. 3-4.) The City agrees with Bloom that the plain language of City Code section 18.06.010(e)(1) is clear and unambiguous. However, Bloom continues to misinterpret this clear and unambiguous language.

Bloom acknowledges that Bloom Fuel Cells use both thermal heat and steam energy in the process of producing electricity. (Bloom's Letter, p. 4.) Bloom argues that, while Bloom Fuel Cells use thermal heat and steam energy, only the "chemical reaction" step[1] produces the electricity within a Bloom Fuel Cell and, therefore, the use of thermal heat and steam energy in other steps is irrelevant.[2] Based on the plain language of City Code section 18.06.010(e)(1), the City disagrees that this distinction matters.

The City's definition does not require, or permit, the City to isolate the various elements of the equipment, fixtures, and personal property used to produce electricity in determining whether the equipment, fixtures, and personal property meet the definition of an electrical power plant. As the Equinix and Intel Projects will be operated or maintained in connection with the production of electricity and use a source of thermal, steam, wind, or solar energy, Bloom Fuel Cells meet the City's definition of an "electric power plant." (City Code, § 18.06.010(e)(1).)

The City's interpretation of its definition is fully supported, indeed compelled, by the plain language of the City Code. For this reason, extrinsic aids are not required to determine the meaning of section 18.06.010(e)(1). However, as City staff previously explained to Bloom, City staff's interpretation of section 18.06.010(e)(1) is fully supported by the 2019 California Electrical Code definition of a "fuel cell system" which includes "[t]he complete aggregate of equipment used to convert chemical fuel into usable electricity and typically consisting of a reformer, stack, power inverter, and auxiliary equipment." (2019 California Electrical Code, § 692.2, incorporated by City Code, § 15.15.010.)

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[1] / To date, Bloom has not provided the City with sufficient information regarding the internal operations of the proposed Projects to confirm Bloom's claim that the "chemical reaction" step does not use thermal heat or steam energy. However, as provided herein, given that the proposed Projects use thermal heat and steam energy in the process of producing electricity, the validity of Bloom's claim does not impact City staff's determination that the proposed Projects meet the City's definition of an electric power plant.

[2] / It should be noted that, in arguing that the proposed Projects are "cogeneration facilities," Bloom suggests the City should consider the complete aggregate of equipment. City staff believes the inconsistency between how Bloom claims its equipment should be viewed for the purposes of the definitions of an "electric power plant" and a "cogeneration facility" illustrates the disingenuous nature of Bloom's argument that the proposed Projects are not electric power plants pursuant to the City Code.

Additionally, Bloom's own description of its Fuel Cell systems supports City staff's conclusion that the proposed Projects meet the City's definition of an electric power plant. Specifically, as explained by Bloom, "[a]bsent this beneficial use of heat and steam for the industrial process of producing hydrogen, *SOFC's cannot generate electricity* directly from natural gas." (Bloom's 2020 FERC Petition, p. 8 (emphasis added).) In other words, Bloom admits that use of heat and steam is necessary for the proposed Projects to produce electricity. For this reason, it is indisputable that the proposed Projects are "operated or maintained in connection with production of electricity using any source of thermal, steam, wind, or solar energy...." (City Code, § 18.06.010(e)(1).)

Because the proposed Projects meet the City's definition of an "electric power plant", City staff informed Bloom in February of 2020 that use permit applications would need to be submitted in order for the City to proceed with its review of the proposed Projects. If Bloom would like City staff to proceed with its review of the proposed Projects, City staff again requests that Bloom submit use permit applications for the proposed Equinix and Intel Projects.

2. The proposed Projects are not allowed by right.

a. The Equinix Project

The Equinix Facility is located in the Lawrence Station Area Plan (LSAP) area. Regulations for the LSAP are set forth in Chapter 18.23 of the City Code and not Chapter 18.54 as suggested in Bloom's Letter. Pursuant to sections 18.23.030 and 18.23.040 of the City Code, neither electric power plants nor fuel cells are permitted or conditionally permitted in the LSAP. However, the LSAP allows the continuation of existing non-conforming industrial uses. (City Code, § 18.23.050.) Specifically, "[f]or parcels with legal uses of buildings existing prior to the adoption of ... [the LSAP], conditional uses of the ML light manufacturing district are conditionally permitted...." (City Code, § 18.23.050(c).) Within the ML light manufacturing district, electric power plants are conditionally permitted subject to issuance of a use permit. (City Code, § 18.60.050.) Therefore, pursuant to the City Code, the Equinix Project is permitted subject to issuance of a use permit approval.

b. The Intel Project

The Intel Project is located in the PD-Planned Development district. In Bloom's Letter, Bloom argues that, in the PD district, "any and all uses" are allowed except those "limited to [heavy industrial] (MH) zoning districts or involving outdoor storage on more than ten percent of the lot area." (Bloom's Letter, p. 2 citing City Code, §§ 18.54.030, 18.54.040.) This is incorrect. As explained in City Code section 18.54.030, for a use to be allowed in the PD district, "such use or uses and their location shall be shown in the development plan of the applicant for the particular planned development zoning district as approved." Where a use is not shown in the approved development plan, the use is not allowed without a rezone. (City Code, § 18.54.030; see also City Code, § 18.54.060(a).)

The PD district applicable to the Intel Project does not identify electric power plants generally, or fuel cells specifically, as a permitted use. Instead, the PD zoning for the site authorizes only "the construction of a 6-story 550,000 square foot office building and 2 parking structures on property located at 2250 Mission College Boulevard currently developed with research and development facilities."[3] As electric power plants are authorized in the MP, ML, MH, or B zoning districts with issuance of a use permit and the applicable PD district permits some uses included in these districts, and the subject property was zoned ML prior to being rezoned to PD, City staff has concluded that the proposed Intel Project does not require a rezone and, pursuant to City Code section 18.60.050, is permitted subject to issuance of a use permit.

As an alternative to obtaining a use permit for the proposed Intel Project, Intel could submit an application to amend the PD district pursuant to Chapter 18.112 of the City Code in order to propose that fuel cells be permitted as a matter of right within the PD district. If Bloom and Intel were interested in pursuing such an amendment to the PD district, City staff recommends that Bloom and Intel set a pre-application meeting with City staff to discuss this proposal further.

3. The City must review complete permit applications to determine the necessary level of CEQA review.

As Bloom has not yet submitted a use permit application for either the Equinix or Intel Projects, City staff has not yet made a final determination regarding the appropriate level of CEQA review. Once Bloom submits use permit applications, City staff will review the applications for completeness and will inform Bloom if additional information is needed in order to determine the appropriate level of CEQA review. However, as discussed further below, based on City staff's current understanding the proposed Projects, City staff does not anticipate that it could reasonably conclude that the proposed Projects qualify for the exemptions identified in Bloom's Exemption Memos.

a. Categorical Exemptions

i. The Class 29 exemption does not appear to apply to the proposed Projects.

It does not appear the proposed Projects fit within the Class 29 exemption. The Class 29 exemption does not exempt entire cogeneration facilities, but rather the installation of cogeneration equipment at existing facilities. As discussed in greater detail below, the proposed Projects do not appear to fit within this exemption for two reasons. First, the proposed Projects are not limited to the installation of additional *equipment* to an existing facility but consist of standalone fuel cell facilities. Second, even if the exemption were interpreted to allow construction of a cogeneration *facility*, rather than simply the installation of cogeneration equipment, the proposed Projects do not meet the City's definition of cogeneration and, thus, do not appear to fit within the exemption.

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[3] / City Council Minutes, September 11, 1990.

1. **The proposed Projects do not appear to meet the plain language or intent of the Class 29 exemption.**

The CEQA Guidelines specify that "Class 29 consists of the *installation of cogeneration equipment* with a capacity of 50 megawatts or less *at existing facilities* ...." (Guidelines, § 15329, emphasis added.) Per its plain language, this exemption does not exempt the development of an entire cogeneration facility, but merely exempts the installation of the *equipment* necessary to allow cogeneration at an already existing facility. (*Ibid.*)

In addition to the plain language of the exemption, this interpretation is supported by the rulemaking history. (See *Butts v. Board of Trustees of California State University* (2014) 225 Cal.App.4th 825, 839 ["When interpreting statutes, courts may turn to the legislative history for enlightenment and the same applies to regulations promulgated by administrative agencies."]; see also *People v. Cruz* (1996) 13 Cal.4th 764, 775 ["The words of a statute [or regulation] are to be interpreted in the sense in which they would have been understood *at the time of the enactment*."] (emphasis added).) The Summary of Comments and Responses to Comments regarding the adoption of the Class 29 exemption clarifies that: "[c]ogeneration involves the addition of a steam-powered electric generating turbine to an *existing* boiler which is producing steam for another purpose or the replacement of an existing boiler by a new boiler with a steam-powered turbine generator." (California EIR Monitor (Jan. 8, 1982) vol. 9, no. 2, p. 19 (emphasis added).) Additionally, the Adopted Amendments to the State CEQA Guidelines with Updated Statement of Reasons explains:

> This section [section 15329] responds to the increased interest in installing cogeneration equipment at *existing* facilities where large boilers are producing steam for other purposes. The installation normally involves retrofitting an existing boiler to use the steam to generate electricity before the steam is used for its originally intended purpose or constructing a new, replacement boiler better adapted to powering a steam turbine for generating electricity before the steam is used for the original purpose.

(Adopted Amendments to the State CEQA Guidelines with Updated Statement of Reasons, Resources Agency of California (Jan. 27, 1982), p. 21 (emphasis added); see also California EIR Monitor (Jan. 8, 1982) vol. 9, no. 1, p. 31.)

Thus, the rulemaking history demonstrates that the intent of the Class 29 exemption is to allow existing facilities to install the equipment needed to create cogeneration capacity in order to increase the energy efficiency of the existing facilities. The exemption does not exempt the construction of entirely new cogeneration facilities.

Here, Bloom does not propose to increase the efficiency of an existing facility by installing cogeneration equipment. Instead, it seeks to install standalone fuel cell systems, which exceed the scope of the exemption (and, as discussed below, also do not meet the definition of a cogeneration facility themselves). Additionally, the proposed Projects will result in a significant

overall increase in natural gas use at the Equinix and Intel Facilities[4] and will do nothing to improve the efficiency of the existing fuel cell systems. Accordingly, it does not appear that the proposed Projects qualify for the exemption.

2. The Class 29 exemption does not appear to apply to the proposed Projects because the proposed Projects are not cogeneration facilities.

Bloom alleges that the proposed Projects consist of cogeneration equipment. However, as noted above, the proposed Projects do not involve the mere addition of equipment to existing facilities but consist of standalone fuel cell systems and, thus, appear ineligible for the exemption on that basis. Moreover, even if the exemption were interpreted to encompass new cogeneration facilities as a whole, it appears the exemption would not apply to the proposed Projects because they do not meet the City's definition of cogeneration as explained below.

Cogeneration "produces both electricity and thermal energy on-site, replacing or supplementing electricity provided from a local utility and fuel burned in an on-site boiler or furnace."[5] "Every CHP application involves the recovery of thermal energy that would otherwise be wasted."[6] A key characteristic of cogeneration facilities is the production a thermal output for use in heating or cooling applications in addition to the production of electricity.[7] In other words, cogeneration facilities produce electricity and thermal energy for independent and unrelated applications.[8]

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[4] / For instance, SVP has calculated that the Intel Project would result in an increase of 65,946.12 cubic feet of natural gas per hour flowing through the site.

[5] / See, e.g., U.S. Dept. of Energy, Combined Heat and Power Technology Fact Sheet Series: Overview of CHP Technologies (2017), p. 1, available at https://www.energy.gov/sites/prod/files/2017/12/f46/CHP%20Overview-120817_compliant_0.pdf (DOE CHP Overview).

[6] / *Ibid.*

[7] / See *id.*, p. 1 fig. 2, p. 2 fig. 3, p. 3 table 1; Dept. of Energy, Combined Heat and Power Technology Fact Sheet Series: Fuel Cells (2016), p. 1 & table 1, available at https://www.energy.gov/sites/prod/files/2016/09/f33/CHP-Fuel%20Cell.pdf (DOE Fuel Cells) [explaining thermal output is used "to produce hot water, low pressure (<30 psig) steam, and chilled water" and distinguishing between "fuel cells used for distributed generation (electricity only)" and those "configured for combined heat and power"]; see also EPA Combined Heat and Power Partnership, Catalog of CHP Technologies, Section 6, Technology Characterization – Fuel Cells (2015), p. 6-3, available at https://www.epa.gov/sites/production/files/2015-07/documents/catalog_of_chp_technologies_section_6._technology_characterization_-_fuel_cells.pdf (EPA CHP Technologies) [distinguishing between Bloom Fuel Cells used for "pure electrical generation" and fuel cells used in CHP applications]; *id.* at p. 6-13 table 6-3 [depicting fuel cell net electrical efficiency separately from net efficiency as part of a CHP application].

[8] / See DOE CHP Overview, *supra*, at p. 1 fig. 2, p. 2 fig. 3, p. 3 table 1; DOE Fuel Cells, *supra*, at p. 1 & table 1; e.g., 40 CFR, § 60.5580 [defining "useful thermal output" as "the thermal energy made available for use in any heating application (*e.g.,* steam delivered to an industrial process

Heat and/or steam are commonly released during the production of electricity by an electric power plant. Many electric power plants, such as combined cycle gas turbine generating facilities, are designed to capitalize on this thermal energy in some manner. Recycling such thermal energy back into an electric power plant can improve efficiency, but doing so does not reclassify the power plant as a cogeneration facility. To meet the City's definition of a cogeneration facility, as stated above, the facility must produce both electricity and a thermal output for a beneficial purpose independent from the production of electricity. If an electric power plant is recycling thermal energy within the plant and the only output is electricity, the electric power plant does not meet the definition of cogeneration.

For example, the production of electricity at the Donald Von Raesfeld Power Plant (DVR) generates steam. DVR takes full advantage of this thermal energy by using the steam to run a secondary turbine, thereby creating more electricity. However, DVR is not a cogeneration facility. There is no thermal output that is used in an application or process independent of the production of electricity.

Much like DVR, the proposed Projects solely function to produce electricity. There is no thermal output providing thermal energy to an independent process or application. Instead, as proposed, Bloom's Fuel Cells rely on the heat and steam *in order to* produce electricity. Specifically, Bloom documents explain that in producing electricity, heat and steam are also generated, which are used, within Bloom's Fuel Cell system, to reform natural gas into hydrogen fuel stock; Bloom further admits that the generation of electricity from natural gas is *dependent* on the heat/steam feedback loop. (Bloom's 2020 FERC Petition, p. 8 ["Absent this beneficial use of heat and steam for the industrial purpose of producing hydrogen, SOFCs cannot generate electricity directly from natural gas."].) Thus, the proposed Bloom Fuel Cells need the thermal energy produced, meaning they are not taking advantage of heat that would otherwise be wasted. Because the thermal energy produced by the proposed Projects is exclusively relegated to the production of electricity and would not "otherwise be wasted," they do not satisfy the City's definition of cogeneration. For these reasons, City staff disagrees that the proposed Projects qualify as cogeneration facilities.

Furthermore, pursuant to the canons of statutory and regulatory construction, "[t]he words of a statute [or regulation] are to be interpreted in the sense in which they would have been understood *at the time of the enactment*." (See, e.g., *People v. Cruz*, *supra*, 13 Cal.4th at p. 775 (emphasis added).) As shown above, at the time the California Natural Resources Agency adopted CEQA Guidelines section 15329, it viewed cogeneration as "the addition of a steam-powered electric generating turbine to an existing boiler which is producing steam *for another purpose* or the replacement of an existing boiler by a new boiler with a steam-powered turbine generator." (California EIR Monitor, *supra*, vol. 9, no. 2, p. 19 (emphasis added).) Thus, consistent with the City's definition, the California Natural Resources Agency understood that

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for a heating application, including thermal cooling applications) *that is not used for electric generation*"] (emphasis added).

cogeneration involved producing thermal energy and electricity for separate and independent processes.

The Federal Energy Regulatory Commission's (FERC's) definition of cogeneration in place at the time that the exemption was adopted is also consistent with the City's definition of cogeneration and illustrates that Bloom's Fuel Cells do not qualify as cogeneration facilities because the thermal energy produced does not, and cannot, support an independent process or application. For example, as explained by FERC in 2005, to meet the definition of cogeneration: "the thermal output of a facility must be used in a process that *is independent of the power production process; the ultimate use of the thermal output cannot be power production.*" (See 111 F.E.R.C. P61,174, 61848, 2005 FERC LEXIS 1188, *15-16 (F.E.R.C. May 6, 2005) (emphasis added); see also 1981 FERC LEXIS 1931, *6, 16 F.E.R.C. P61,060 (F.E.R.C. July 23, 1981 [concluding "in a *bona fide* cogeneration system, the use of thermal energy must be completely independent of the power production process"].) As shown above, Bloom's Fuel Cell power systems cannot meet this requirement because the thermal energy is used exclusively for electricity production, not an independent process.

In addition, in 2017, in response to Bloom's petition for FERC to revise its regulations to allow Bloom Fuel Cells to meet the definition of cogeneration, the California Public Utility Commission (CPUC) expressly rejected Bloom's argument that Bloom Fuel Cells serve a cogeneration function. (CPUC Protest, p. 3.) The CPUC further explained Bloom's Fuel Cell power systems are more comparable to combined cycle gas turbine generating facilities (like DVR), which recapture steam exhaust from the electric generation process for reuse in self-contained electrical generation but lack a bone fide associated industrial or commercial process. (*Id.* at p. 4.)

In a separate protest to Bloom's FERC petition, the Combined Heat & Power Industry Association (CHPA) more bluntly explained that:

> Bloom's efforts to conflate the internal steam-methane reformation process with the cogeneration function defined by the Commission's regulations is mere subterfuge, which is made clear not only by Bloom's own contradictory assertions but also by the physical reality that Bloom's Energy Servers are designed and operated exclusively to produce electricity. Moreover, the fact that there is an international market for the sale of hydrogen gas and that, completely internal to the Energy Servers, thermal energy is used to produce hydrogen and is then promptly consumed as a necessary step in the generation of electricity, in no way supports a conclusion that the thermal energy is "useful", as contemplated by the Commission. Bloom neither makes use of, intends to make use of <u>*nor could it make use of*</u> the hydrogen or thermal output for any business purpose independent of the electric production process. Thus, despite Bloom's assertions to the contrary, its Energy Servers do not produce "useful thermal output" within the meaning of 18 C.F.R. § 292.202(h) or for purposes of complying with 18 C.F.R. § 292.205(a).

(CHPA Protest, pp. 3-4 (emphasis original).)

Additionally, the City's definition accords with CEQA's intent to promote energy efficiency, renewable resources, and decreased greenhouse gas (GHG) emissions. When cogeneration equipment is added to a facility that is already producing electricity, the energy efficiency of the facility increases (and net GHG emissions decrease) because the heat or steam that would otherwise be wasted is channeled into a useful application such as space or water heating. Accordingly, such a class of projects warrants a categorical exemption because it *improves* baseline conditions. (See, e.g., California EIR Monitor, *supra*, vol. 9, no. 2, p. 19 [adjustments to enable cogeneration require "only minor increases in fuel consumption"].) In contrast, where a stand-alone natural gas-based electric power plant is proposed, it does nothing to increase the efficiency of existing facilities, but rather creates a new and increased demand for natural gas over baseline conditions.

It is this demand for new and increased quantities of natural gas that distinguish projects, such as Bloom's proposed Projects, from the types of equipment exempt under the Class 29 exemption. This additional natural gas demand must be evaluated pursuant to CEQA in the context of energy impacts, use of nonrenewable resources, and GHG emissions. (See CEQA Guidelines, §§ 15064.4, 15126.2 & Appendix F.) If the Class 29 exemption was interpreted to exempt fossil fuel energy production from CEQA by virtue of an electric power plant recycling thermal energy to boost electricity production, then the exemption would allow many fossil fuel power plants to avoid CEQA review, in direct conflict with CEQA's goals as set forth in Appendix F and CEQA Guidelines sections 15064.4 and 15126.2.

Last, while not controlling for CEQA purposes, materials by the Environmental Protection Agency (EPA) and Department of Energy (DOE) further clarify that fuel cells which only serve to produce electricity do not constitute cogeneration. While both agencies recognize that fuel cells may be used for cogeneration applications, they clearly distinguish between fuel cells used for the production of electricity alone and those "configured for combined heat and power," i.e., cogeneration.[9] Their documents show that configuring fuel cells for cogeneration increases the efficiency of fuel cells over their baseline condition, just as with other electric power plants.[10] They additionally show that configuring fuel cells for cogeneration reduces carbon dioxide emissions significantly.[11] Further, the EPA specifies that Bloom produces "a pure electric fuel cell (i.e. no waste heat is captured)" as distinguishable from fuel cells in CHP applications.[12] Thus, the EPA and DOE documents illustrate that fuel cells, in of themselves, do not constitute cogeneration facilities, and the EPA explicitly distinguishes Bloom's proposed "pure electric fuel cells" from those capable of being configured for cogeneration.

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[9] / See EPA CHP Technologies, *supra*, at p. 6-3; DOE Fuel Cells, *supra*, at p. 1.

[10] / See DOE Fuel Cells, *supra*, at p. 2 table 2 [compare electric efficiency to overall efficiency for fuel cells configured for CHP]. Also compare EPA CHP Technologies, *supra*, at p. 6-11 table 6-2 [showing pure electric fuel cell efficiency] with p. 6-13 table 6-3 [depicting efficiencies of fuel cells configured for CHP].

[11] / EPA CHP Technologies, *supra*, at p. 6-19 table 6-5; DOE Fuel Cells, *supra*, at p. 4 table 4.

[12] / EPA CHP Technologies, *supra*, at pp. 6-3 & fn. 91, 6-12.

Thus, City staff concludes that Bloom's interpretation of CEQA Guidelines section 15329 is inconsistent both with the City's definition of cogeneration as well as the commonly understood definition of cogeneration at the time the California Natural Resources Agency adopted the exemption because Bloom's Fuel Cells do not, and cannot, use thermal energy for a beneficial purpose independent from the production of electricity. This conclusion is further supported by CEQA's intent as well as EPA and DOE materials that address cogeneration applications with respect to fuel cells specifically. Accordingly, the proposed Equinix and Intel Projects do not appear to constitute cogeneration facilities for the purposes of CEQA Guidelines section 15329. Therefore, while City staff will consider this issue further once Bloom has submitted complete use permit applications for the proposed Equinix and Intel Projects, City staff anticipates that it will conclude that the proposed Projects are not subject to the Categorical "Class 29" CEQA Exemption.

ii. The Class 1 exemption does not appear to apply to the proposed Projects.

The CEQA Guidelines exempt minor projects related to existing facilities. Guidelines section 15301 provides: "Class 1 consists of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use." It further specifies that "**[t]he key consideration is whether the project involves negligible or no expansion of use**." (CEQA Guidelines, § 15301 (emphasis added).)

The proposed Projects do not appear to fall within this exemption because, as quoted above, the exemption requires the Project to, *at most*, be a negligible expansion of use. As proposed, the Projects would develop Bloom Fuel Cell systems at the Equinix and Intel Facilities with 2.5 MW and 10.5 MW capacities respectively. The City Code provides a clear demarcation as to what constitutes a negligible expansion in electricity production in the City. Specifically, where an electric power plant will generate over 0.5 MW of electricity, the City has determined that the power plant is of a sufficient size to require a use permit. (City Code, §§ 18.06.010(e)(1), 18.60.050.) The Equinix and Intel Projects will generate 5 and 21 times this amount respectively. Given that both of the proposed Projects will generate substantially more electricity than required to meet the City's definition of an electric power plant that requires a use permit, City staff does not believe the proposed Projects, as currently proposed, constitute a negligible expansions of a use.

World Business Academy v. State Lands Com. (2018) 24 Cal.App.5th 476 provides a helpful counterpoint to projects, such as Bloom's proposed Projects, which propose to expand existing uses. In that case, the existing facilities exemption was applied to a replacement lease extension for the Diablo Canyon nuclear powerplant. The court found the project fit squarely within the exemption because it was "undisputed that PG&E has leased the same land from the Commission for nearly 50 years, and that *the lease replacement maintains rather than expands the plant's current operational capacity*." (*Id.* at p. 497 (emphasis added).) Similarly, in *Bloom v. McGurk* (1994) 26 Cal.App.4th 1307, the court emphasized the undisputed fact that there would

be no change in operations at a medical waste treatment facility in finding that the project "falls squarely within the [] language of the class 1 categorical exemption." (*Id.* at p. 1312; see also *North Coast Rivers Alliance v. Westlands Water Dist.* (2014) 227 Cal.App.4th 832, 868 [interim water supply renewal contracts, which did not result in an any changes to the use and operation of existing CVP water facilities, clearly "came within the scope of the categorical exemption for existing facilities"].)

The court's analysis in *Erven v. Board of Supervisors* (1975) 53 Cal.App.3d 1004 further illustrates the distinction between maintaining an existing use and expanding that use for purposes of the existing facilities exemption. There, the county adopted a resolution regarding intent to provide improvements and maintenance to existing county roads. The court found the project fell within the existing facilities exemption because "the only activity contemplated by the Board was the maintenance and repair of public roads already existing in the area." (*Id.* at p. 1013.) However, the court specifically stated that a decision to widen the roads or acquire additional roads for improvement purposes "would not qualify for exemption and compliance with the CEQA would be required either by the preparation and consideration of an environmental impact report or by a negative declaration." (*Id.* at p. 1014.) Thus, as shown by case law, the exemption is inapplicable when there is more than a negligible expansion of an existing use.

Bloom also argues that the proposed Projects will not change existing commercial uses at the Equinix and Intel Facilities. However, the critical question is whether anything more than a negligible expansion is proposed, and not whether the expansion is proposed at an existing commercial or industrial facility. (See *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 966-967 (*County of Amador*) [rejecting the framing of a project as the mere acquisition of an existing hydroelectric facility where the project would also add substantial consumptive use and finding the change in use "removes the project from the scope of the existing facilities exemption"].) It is clear that the proposed Projects at issue here are not the ongoing commercial use of the sites but rather the installation of new fuel cell power systems producing either 2.5 MW or 10.5 MW of electricity. Therefore, while City staff will consider this issue further once Bloom has submitted complete use permit applications for the proposed Equinix and Intel Projects, based on the materials provided by Bloom to date, City staff does not anticipate that it could reasonably conclude that the proposed Projects constitute a negligible expansion of an existing use.

iii. The Class 3 exemption does not appear to apply to the Equinix Project.

The Class 3 exemption exempts "construction and location of limited numbers of new, small facilities or structures; installation of small new equipment and facilities in small structures; and the conversion of existing small structures from one use to another where only minor modifications are made in the exterior of the structure." (Guidelines, § 15303.)

Bloom specifically relies on the following subdivisions in claiming that the Equinix Project is eligible under the Class 3 exemption:

> (d) Water main, sewage, electrical, gas, and other utility extensions, including street improvements, of reasonable length to serve such construction.
>
> (e) Accessory (appurtenant) structures including garages, carports, patios, swimming pools, and fences.

With some exceptions, subdivision (d) applies to specified "utility extensions" serving up to three-single family residences, apartments or duplexes with up to six dwelling units, or up to four store, motel, office, restaurant or similar commercial buildings not exceeding 10,000 square feet. (CEQA Guidelines, § 15303, subds. (a)-(d); see also *Voices for Rural Living v. El Dorado Irrigation Dist.* (2012) 209 Cal.App.4th 1096, 1109 (*Voices for Rural Living*) ["This categorical exemption thus applies when the project consists of a small construction project *and the utility and electrical work necessary to service that project.*"] (emphasis added).) The proposed Projects are not proposed to serve up to three-single family residences, apartments or duplexes with up to six dwelling units, or up to four store, motel, office, restaurant or similar commercial buildings not exceeding 10,000 square feet. Furthermore, the proposed Projects propose the construction of electrical power plants and not "utility extensions." For both of these reasons, the proposed Projects do not appear to qualify for the Class 3 categorical exemption pursuant to subdivision (d).

Subdivision (e) appears equally inapplicable. It exempts common accessory structures — "garages, carports, patios, swimming pools, and fences" — none of which have any similarity to fuel cells. While City staff will consider this issue further once Bloom has submitted complete use permit applications for the proposed Equinix and Intel Projects, based on the materials provided by Bloom to date, City staff does not believe it would be reasonable to conclude subdivision (e) covers a 4,900 square foot electrical power plant that would generate electricity sufficient to power the equivalent of 3,231 homes. (*Voices for Rural Living*, *supra*, 209 Cal.App.4th at pp. 1109-1110 [explaining the fact that the project would provide 216 equivalent dwelling units worth of water "is a fact that distinguishes the project from the type of projects contemplated by the class 3 categorical exemption"].)

Furthermore, while Bloom's Exemption Memo for the Equinix Project[13] does not assert that the Equinix Project is a structure similar to a store, motel, office, or restaurant under subdivision (c), as a general matter, City staff does not believe fuel cells are similar to a store, motel, office, or restaurant use. However, City staff will consider this issue further after Bloom has submitted complete use permit applications for the proposed Equinix and Intel Projects. In undertaking this evaluation, City staff will require detailed information on the types, and quantities, of hazardous substances used and/or produced by the proposed Projects to determine if the proposed Projects "involv[e] the use of significant amounts of hazardous substances...." (CEQA Guidelines, § 15303, subd. (c).)

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[13] / Bloom's Exemption Memo for the Intel Project does not address the Class 3 exemption.

While City staff will consider this issue further once Bloom has submitted complete use permit applications for the proposed Equinix and Intel Projects, based on the materials provided by Bloom to date, City staff does not anticipate that it could reasonably conclude that the proposed Projects qualify for the "Class 3" categorical exemption.

iv. While the City has not identified any categorical exemption that may be applicable, if a categorical exemption was applicable, the City would also need to evaluate whether any exceptions to the categorical exemptions prevent the City from relying on the categorical exemption.

An agency may not apply a categorical exemption without considering whether an exception to the exemption applies. (*Berkeley Hillside Preservation v. City of Berkeley* (2015) 60 Cal.4th 1086, 1103.) Once Bloom has submitted complete use permit applications for the proposed Equinix and Intel Projects, City staff will evaluate whether any of the exceptions to the categorical exemptions are applicable.

Among the issues that will need to be considered by City staff is whether the proposed Projects have the potential to result in cumulatively considerable energy impacts. Specifically, Appendix F to the CEQA Guidelines demonstrates that a lead agency should consider whether a proposed project will: (1) decrease overall per capita energy consumption, (2) decrease reliance on fossil fuels such as coal, natural gas and oil, and (3) increase reliance on renewable energy sources. It does not appear that the proposed Projects are consistent with any of these energy conservation goals. However, City staff will consider this and other issues relevant to CEQA's exceptions to the categorical exemptions further once Bloom has submitted complete use permit applications for the proposed Equinix and Intel Projects.

b. The common sense exemption does not appear to apply to the proposed Projects.

The common sense exemption requires certainty that that there is no possibility that the activity may have a significant effect on the environment. (Guidelines, §15061(b)(3); *Davidon Homes v. City of San Jose* (1997) 54 Cal.App.4th 106, 117 ["If legitimate questions can be raised about whether the project might have a significant impact and there is any dispute about the possibility of such an impact, the agency cannot find with certainty that a project is exempt [pursuant to the common sense exemption]."].)

As Bloom is aware, the superior court previously held that substantial evidence demonstrates that Bloom's Fuel Cells emit approximately twice the CO_2e as Silicon Valley Power's (SVP's) grid. (Case No. 19CV348838, Judgement, p. 14.) SVP has aggressively procured substantial renewable and carbon-free energy sources to reduce its portfolio's GHG emissions. And SVP's GHG emissions will continually decrease in the future pursuant to its 2018 Integrated Resource Plan and to meet state mandates such as Senate Bill 100 (2018). In stark contrast, Bloom's Fuel Cell power systems lock in reliance on natural gas for a period of 15-20 years and, as a

result, will cause significant GHG emissions as compared to SVP's grid.[14] Therefore, while City staff will consider this issue further once Bloom has submitted complete use permit applications for the proposed Equinix and Intel Projects, the GHG emission impacts of the proposed Projects alone likely preclude the City from relying on the common sense exemption.

4. City staff recommendations regarding information to include with the use permit applications for the proposed Projects.

The information listed below will assist City staff in reaching a determination regarding the appropriate level of CEQA review for the proposed Projects. While City staff typically makes requests for additional information after a developer has submitted a complete land use application, City staff understands that Bloom would like the use permit application process to proceed as quickly as reasonably possible. To help facilitate that goal, City staff requests that Bloom provide the following information to the City when it submits its use permit applications for the proposed Projects:

- Documentation from the Bay Area Air Quality Management District (BAAQMD) confirming that the Equinix and Intel Projects are exempt from new source review regulations;
- BAAQMD certified source test data for criteria pollutants for Bloom Fuel Cell systems;
- Health and safety plans and/or emergency preparedness plans or studies related to Bloom Fuel Cell systems;
- Information related to whether any natural gas pipelines will need to be replaced, upsized, or newly installed on- or off-site in order to accommodate the additional natural gas demand created by the proposed Projects;
- All information related to any safety rating provided to Bloom Fuel Cell systems;
- All information related to the disposal of Bloom Fuel Cell batteries and filters; and
- All information regarding the quantity of the following substances created (both per megawatt hour of energy production and parts per million):
    - Arsenic;
    - Benzene;
    - Chromium VI;
    - Hydrogen;
    - Hydrogen sulfide;
    - Lead;
    - Toluene;
    - Volatile organic compounds; and
    - Xylene.

CONCLUSION

As discussed in this letter, the Equinix and Intel Projects each require a use permit. In Bloom's Letter, Bloom suggests that "[t]here has been nearly a year's delay in the installation of the

[14] / Bloom has repeatedly asserted that the use of biogas is not possible.

Bloom Energy Servers...." (Bloom's Letter, p. 2.) As early as February of this year, City staff informed Bloom that use permit applications would need to be submitted and stated that Reena Brilliot, Planning Manager, could assist in the application process. To date, Bloom has not filed a planning application to apply for the required use permits or contacted Ms. Brilliot for assistance in preparing the applications. Therefore, the City is not the cause of any perceived delay in the processing of necessary permits for the Equinix and Intel Projects.

As City staff did in February, the City again recommends that Bloom submit planning applications should Bloom want to pursue use permits for the proposed Projects. Planning applications are complete once all required documentation has been received and approved by Planning staff and payment of all applicable planning fees has been made. (City Code, § 18.110.020.) Should Bloom have any questions regarding the application process or the fees required, please contact Ms. Brilliot, Planning Manager (RBrilliot@santaclaraca.gov).

Once Bloom has completed planning applications, City staff will proceed with its review of the proposed Projects including a determination regarding the appropriate level of CEQA review. As discussed in this letter, based on City staff's initial review of Bloom's Letter and attachments, City staff does not anticipate that the proposed Projects will qualify for a CEQA exemption. However, City staff will make its official recommendation regarding the appropriate level of CEQA review after it has received and reviewed the complete project applications. Thereafter, the final determination regarding CEQA compliance will be made by the City's decisionmaker as part of its consideration of the proposed Projects.

If you have any further questions, please let me know.

Sincerely,

Alexander Abbe
Assistant City Attorney

cc: Kevin Kolnowski, Chief Operating Officer, Silicon Valley Power
Ann Hatcher, Assistant Director of Electric Utility, Silicon Valley Power
Manuel Pineda, Assistant City Manager
Brian Doyle, City Attorney
Anne Baptiste, Esq.