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April 7, 2020

### Via Email:

Kara Hawkins, Planner / Environmental

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Rosalynn Hughey, Director City of San José Department of Planning, Building & Code Enforcement

200 East Santa Clara Street, Third Floor

San José, CA 95113

Re: Comments on the Initial Study/Mitigated Negative Declaration for Hummingbird Energy Storage Project (File No. CP19-020)

Dear Ms. Hawkins and Ms. Hughey:

On behalf of San José Citizens for Sensible Industry ("Citizens"), we submit these comments on the Initial Study/Mitigated Negative Declaration ("IS/MND") for the Hummingbird Energy Storage Project ("Project") prepared pursuant to the California Environmental Quality Act ("CEQA")<sup>2</sup> by the City of San José ("the City"). The Project is proposed by esVolta, LP ("Applicant") and would allow an energy storage facility in an existing 102,462 square foot industrial building with a new substation of approximately 15,000 square feet at 6321 San Ignacio Avenue in southern San José.<sup>3</sup> The energy storage facility will contain lithium-ion batteries with a total storage capacity of 75 MW/300 MWh.<sup>4</sup> The IS/MND states that it is the

<sup>&</sup>lt;sup>1</sup> Project File Number CP19-020.

<sup>&</sup>lt;sup>2</sup> Public Resources Code § 21000 et seq.

<sup>&</sup>lt;sup>3</sup> Initial Study: Hummingbird Energy Storage Project prepared by City of San José in consultation with David J. Powers & Associates, Inc. (March 2020) ("IS/MND"), pp. 6-7.

<sup>&</sup>lt;sup>4</sup> IS/MND, p. 7.

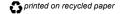
purpose of the Project to store energy produced by intermittent renewable sources to assist the City and the State of California in meeting their carbon-free electricity goals.<sup>5</sup> The Project requires a Conditional Use Permit from the City.<sup>6</sup>

In addition, the Project includes a 2.5-mile-long transmission line within the Monterey Road public right-of-way that would connect the energy storage facility and substation to the existing Pacific Gas & Electric Metcalf Substation. The transmission line would run underground for about two miles and then come aboveground for the final half a mile to traverse over Coyote Creek and connect to the Metcalf Substation. Three riser poles, each approximately 130 feet tall, would support the overhead transmission line crossing Coyote Creek. The IS/MND acknowledges that installation of the poles and overhead transmission line would disturb riparian habitat around the creek.

Construction is anticipated to take approximately six months for the battery storage facility, substation, and transmission line. This would entail some excavation, grading, and vegetation management in addition to building the substation and installing mechanical equipment.

Based on our review of the IS/MND, we have concluded that it fails to comply with CEQA. The IS/MND's failure to account for energy losses from battery inefficiency and commit to only storing energy produced by renewable energy undercuts its objective of advancing carbon-free electricity. The IS/MND underrepresents emissions of greenhouse gases (GHGs) and criteria pollutants. The IS/MND fails to evaluate potentially significant health risks from construction emissions. It also neglects to evaluate hazard and health risk impacts from a possible battery fire or explosion despite numerous nearby residences and





<sup>&</sup>lt;sup>5</sup> IS/MND, p. 6.

<sup>&</sup>lt;sup>6</sup> IS/MND, p. 6.

<sup>&</sup>lt;sup>7</sup> IS/MND, p. 6.

<sup>&</sup>lt;sup>8</sup> IS/MND, p. 6.

<sup>&</sup>lt;sup>9</sup> IS/MND, p. 9.

<sup>&</sup>lt;sup>10</sup> IS/MND, p. 9.

<sup>&</sup>lt;sup>11</sup> IS/MND, pp. 32, 110. Page 11 of the IS/MND refers to a nine-month construction period, but later analyses in the document refer several times to a total construction period of six months. We are operating under the assumption that the nine-month period is a typo.

<sup>12</sup> IS/MND, p. 11.

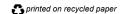
substantial evidence of severe health consequences of accidents that have occurred in other places. The IS/MND does not properly assess and mitigate potentially significant biological impacts, such as crushing the western pond turtle and its eggs during transmission line construction and bird collisions with the overhead transmission line. Finally, the IS/MND fails to adequately analyze and mitigate noise impacts from construction activity undergrounding the transmission line and improperly relies on a hidden study to support its evaluation of operational noise.

These comments were prepared with the assistance of health hazard and air pollution experts Phyllis Fox, Ph.D., P.E., Ray Kapahi, M.Eng., and David Marcus, M.A., senior biologist and wildlife ecologist Scott Cashen, M.S., and noise expert Derek Watry of Wilson Ihrig. Comments and curricula vitae of Dr. Fox, Mr. Kapahi, and Mr. Marcus are attached to this letter as Exhibit A.<sup>13</sup> Mr. Cashen's comments and curriculum vitae are attached as Exhibit B.<sup>14</sup> Mr. Watry's comments and curriculum vitae are attached as Exhibit C.<sup>15</sup> Exhibits A through C are fully incorporated herein and submitted to the City herewith. Therefore, the City must separately respond to the technical comments in Exhibits A through C.

For the reasons discussed herein, and in the attached expert comments, Citizens urges the City to remedy the deficiencies in the IS/MND by preparing a legally adequate environmental impact report ("EIR") pursuant to CEQA.

#### I. STATEMENT OF INTEREST

Citizens is an unincorporated association of individuals and labor organizations that are concerned about environmental and public health impacts from development in the region where the coalition's members and their families live, work, and recreate. The coalition is comprised of individuals and



<sup>&</sup>lt;sup>13</sup> Exhibit A: Comments on the Initial Study and Mitigated Negative Declaration for the Hummingbird Energy Storage Project by Phyllis Fox, Ray Kapahi, and David Marcus (April 6, 2020) ("Fox Comments").

<sup>&</sup>lt;sup>14</sup> Exhibit B: Letter from Scott Cashen to William Mumby re Comments on the Initial Study and Mitigated Negative Declaration for the Hummingbird Energy Storage Project (March 30, 2020) ("Cashen Comments").

<sup>&</sup>lt;sup>15</sup> Exhibit C: Letter from Derek Watry to William Mumby re Hummingbird Energy Storage Project, San José, California – Review and Comment on CEQA Initial Study Noise Analysis (April 6, 2020) ("Watry Comments").

organizations, including California Unions for Reliable Energy ("CURE") and its local affiliates, and the affiliates' members and their families, as well as other individuals who live, work, and recreate in Santa Clara County.

Citizens has an interest in enforcing environmental laws that encourage sustainable development and ensure a safe working and living environment for its members. Environmental degradation jeopardizes future jobs by causing construction moratoriums, eliminating protected species and habitat, and putting added stresses on the environmental carrying capacity of the state. This reduces future employment opportunities. In contrast, well designed projects that reduce the environmental impacts of electricity generation and transmission improve long-term economic prospects and reduce adverse impacts on local communities.

CURE is a coalition of labor organizations whose members encourage sustainable development of California's energy resources. CURE's members help solve the State's energy problems by building, maintaining, and operating conventional and renewable energy power plants and transmission facilities. Since its founding in 1997, CURE has been committed to building a strong economy and a healthier environment. CURE has helped cut smog-forming pollutants in half, reduced toxic emissions, increased the use of recycled water for cooling systems, and pushed for groundbreaking pollution control equipment as the standard for all new power plants, all while helping to ensure that new power plants and transmission facilities are built with highly trained, professional workers who live and raise families in nearby communities.

Individual members of Citizens, CURE, and its affiliated labor organizations live, work, recreate, and raise their families in Santa Clara County. They would be directly affected by the Project's environmental and health and safety impacts. Individual members of CURE's affiliates may also work on the Project itself. They will, therefore, be first in line to be exposed to any hazardous materials, air contaminants or other health and safety hazards that exist onsite. The members of Citizens have an interest in enforcing environmental laws that encourage sustainable development and ensure a safe working environment for its members.

#### II. LEGAL BACKGROUND

### A. CEQA

CEQA is intended to provide the fullest possible protection to the environment. CEQA requires that a lead agency prepare and certify an EIR for any discretionary project that may have a significant adverse effect on the environment. In order to set an accurate foundation for the analysis, an EIR must include a description of the "existing physical conditions in the affected area." CEQA requires analysis of the "whole of an action," including the "direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment." Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made. Thus, the EIR protects not only the environment but also informed self-government." In the environment.

In addition, public agencies must adopt feasible mitigation measures that will substantially lessen or avoid a project's potentially significant environmental impacts and describe those mitigation measures in the EIR.<sup>20</sup> A public agency may not rely on mitigation measures of uncertain efficacy or feasibility.<sup>21</sup> "Feasible" means capable of successful accomplishment within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.<sup>22</sup> Mitigation measures must be enforceable through permit conditions, agreements, or other legally binding instruments.<sup>23</sup>

CEQA prohibits deferring identification of mitigation measures when there is uncertainty about the efficacy of those measures or when the deferral transfers

<sup>&</sup>lt;sup>16</sup> Pub. Res. Code §§ 21002.1(a), 21100(a), 21151(a); 14 C.C.R. §§ 15064(a)(1), (f)(1), 15367.

 $<sup>^{17}</sup>$  Communities for a Better Env't v. South Coast Air Quality Mgmt. Dist. (2010) 48 Cal.4th 310, 319–322; 14 C.C.R. § 15125.

<sup>&</sup>lt;sup>18</sup> Pub. Res. Code § 21065; 14 C.C.R. § 15378(a).

 $<sup>^{19}</sup>$  Citizens of Goleta Valley v. Board of Supervisors (1990) 52 Cal.3d 553, 564 (internal quotations omitted).

<sup>&</sup>lt;sup>20</sup> Pub. Res. Code §§ 21002, 21081(a), 21100(b)(3); 14 C.C.R. § 15126.4.

<sup>&</sup>lt;sup>21</sup> Kings County Farm Bureau v. City of Hanford (1990) 221 Cal.App.3d 692, 727–728.

<sup>&</sup>lt;sup>22</sup> 14 C.C.R. § 15364.

<sup>&</sup>lt;sup>23</sup> *Id.* § 15126.4(a)(2).

authority for approving the measures to another entity.<sup>24</sup> An agency may only defer identifying mitigation measures when practical considerations prevent formulation of mitigation measures at the usual time in the planning process, the agency commits to formulating mitigation measures in the future, and that commitment can be measured against specific performance criteria the ultimate mitigation measures must satisfy.<sup>25</sup>

### B. An EIR is Required

"At the heart of CEQA is the requirement that public agencies prepare an EIR for any project that may have a significant effect on the environment." A negative declaration is improper, and an EIR must be prepared, whenever it can be fairly argued on the basis of substantial evidence that the project may have a significant environmental impact. [S]ignificant effect on the environment" is defined as "a substantial, or potentially substantial, adverse change in the environment." An effect on the environment need not be "momentous" to meet the CEQA test for significance; it is enough that the impacts are "not trivial." Substantial evidence, for purposes of the fair argument standard, includes "fact, a reasonable assumption predicated upon fact, or expert opinion supported by fact."



<sup>&</sup>lt;sup>24</sup> Id. § 15126.4(a)(1)(B); City of Marina v. Board of Trustees of the California State University (2006) 39 Cal.4th 341, 366; Sundstrom v. County of Mendocino (1988) 202 Cal.App.3d 296, 308–309. <sup>25</sup> POET, LLC v. California Air Res. Bd. (2013) 218 Cal.App.4th 681, 736, 739–740, as modified on denial of reh'g (Aug. 8, 2013), review denied (Nov. 20, 2013); see also Preserve Wild Santee v. City of Santee (2012) 210 Cal.App.4th 260, 281 (EIR deficient for failure to specify performance standards in plan for active habitat management of open space preserve); Endangered Habitats League, Inc. v. County of Orange (2005) 131 Cal.App.4th 777, 794 (EIR's deferral of acoustical report demonstrating structures designed to meet noise standards without setting the actual standards is inadequate for purposes of CEQA); Gentry v. Murrieta (1995) 36 Cal.App.4th 1359, 1396 (negative declaration's deferral of mitigation measure improper where the measure required applicant to comply with recommendations of a report that did not exist yet with no further guidance on what mitigation was necessary).

<sup>&</sup>lt;sup>26</sup> Friends of College of San Mateo Gardens v. San Mateo County Community College Dist. (2016) 1 Cal.5th 937, 944 (internal citations and quotations omitted).

<sup>27</sup> Id. at 957.

 $<sup>^{28}</sup>$  Pub. Res. Code § 21068; 14 C.C.R. § 15382; County Sanitation Dist. No. 2 v. County of Kern (2005) 127 Cal.App.4th 1544, 1581.

<sup>&</sup>lt;sup>29</sup> No Oil, Inc. v. City of Los Angeles (1974) 13 Cal.3d 68, 83 fn. 16.

<sup>&</sup>lt;sup>30</sup> Pub. Res. Code § 21080(e)(1) (emphasis added); Citizens for Responsible Equitable Environmental Development v. City of Chula Vista (2011) 197 Cal.App.4th 327, 331 ("CREED").

An agency's decision to rely on an MND under CEQA is reviewed by a court for abuse of discretion under the fair argument standard.<sup>31</sup> To determine if there has been an abuse of discretion, a court reviews the agency's factual conclusions de novo.<sup>32</sup> (*Id.*)

Under the fair argument standard, a reviewing court may not uphold an agency's decision to not prepare an EIR because of substantial evidence that the project would not have a significant environmental impact.<sup>33</sup> The reviewing court's function is to determine whether substantial evidence supports the agency's conclusion as to whether the prescribed fair argument could be made.<sup>34</sup> If there is substantial evidence that the proposed project might have a significant impact, evidence to the contrary is not sufficient to support a decision to dispense with preparation of an EIR and adopt a negative declaration.<sup>35</sup> Neither the lead agency nor a court may "weigh" conflicting substantial evidence to determine whether an EIR must be prepared in the first instance.<sup>36</sup> "The fair argument standard thus creates a low threshold for requiring an EIR, reflecting the legislative preference for resolving doubts in favor of environmental review."<sup>37</sup>

Where experts have presented conflicting evidence on the extent of the environmental effects of a project, the agency must consider the effects to be significant and prepare an EIR.<sup>38</sup> In short, when "expert opinions clash, an EIR should be done."<sup>39</sup> "It is the function of an EIR, not a negative declaration, to resolve conflicting claims, based on substantial evidence, as to the environmental effects of a project."<sup>40</sup> Where substantial evidence is presented, "evidence to the contrary is not sufficient to support a decision to dispense with preparation of an

 $<sup>^{31}</sup>$  Save the Agoura Cornell Knoll v. City of Agoura Hills (2020) Nos. B292246, B295112, 2020 WL 1270355, \*4 ("STACK").

 $<sup>^{32}</sup>$  *Id*.

 $<sup>^{33}</sup>$  *Id*.

 $<sup>^{34}</sup>$  *Id*.

 $<sup>^{35}</sup>$  *Id*.

<sup>&</sup>lt;sup>36</sup> *Id.* at \*13.

<sup>&</sup>lt;sup>37</sup> *Id.* at \*4.

<sup>&</sup>lt;sup>38</sup> Pocket Protectors v. City of Sacramento (2004) 124 Cal.App.4th 903, 935; Sierra Club v. County of Sonoma (1992) 6 Cal.App.4th 1307, 1317–1318; CEQA Guidelines § 15064(f)(5).

<sup>&</sup>lt;sup>39</sup> Pocket Protectors, 124 Cal.App.4th at 928; Sierra Club, 6 Cal.App.4th at 1317–1318.

<sup>&</sup>lt;sup>40</sup> Pocket Protectors, 124 Cal.App.4th at 935.

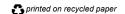
EIR and adopt a negative declaration, because it could be 'fairly argued' that the project might have a significant environmental impact."<sup>41</sup>

The fair argument test requires the preparation of an EIR whenever "there is substantial evidence that any aspect of the project, either individually or cumulatively, may cause a significant effect on the environment, regardless of whether the overall effect of the project is adverse or beneficial." <sup>42</sup> As described below substantial evidence is present here that the Project may cause a significant effect on the environment.

In particular, these comments show that the Project may result in significant impacts from emissions of criteria air pollutants, GHG emissions exacerbating climate change, and release of hazardous air pollutants from a potential battery fire or other accident. In addition, these comments explain that installation of transmission lines associated with the Project could result in potentially significant impacts on turtle and bird protected species and from construction noise disruption to nearby residences. Thus, the City is required under CEQA to take a closer look at the potentially significant environmental impacts of the Project in a legally adequate EIR.

### III. THE IS/MND FAILS TO PROVIDE A COMPLETE AND ACCURATE PROJECT DESCRIPTION

CEQA requires that an EIR "set forth a project description that is sufficient to allow an adequate evaluation and review of the environmental impact." Similarly, an IS/MND must present a complete and accurate description of the project under consideration. 44 "The scope of the environmental review conducted for the initial study must include the entire project. . . . [A] correct determination of the nature and scope of the project is a critical step in complying with the mandates of CEQA." A negative declaration is "inappropriate where the agency has failed"



<sup>&</sup>lt;sup>41</sup> Sundstrom, 202 Cal.App.3d at 310 (citation omitted).

<sup>42 14</sup> C.C.R. § 15063(b)(1) (emphasis added).

 $<sup>^{43}</sup>$  San Joaquin Raptor Rescue Center v. County of Merced 149 Cal.App.4th 645, 654 (citing 14 C.C.R.  $\,$  \$ 15124).

<sup>44 14</sup> C.C.R. § 15063(d)(1) (requiring an initial study to include a description of the project).

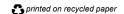
<sup>&</sup>lt;sup>45</sup> Nelson v. County of Kern (2010) 190 Cal.App.4th 252, 267 (internal quotations and citations omitted).

either to provide an accurate project description or to gather information and undertake an adequate environmental analysis. An accurate and complete project description is necessary for an intelligent evaluation of the potential environmental impacts of the agency's action. Only through an accurate view of the project may affected outsiders and public decision-makers balance the proposal's benefit against its environmental cost, consider mitigation measures, assess the advantage of terminating the proposal . . . and weigh other alternatives in the balance."46 For purposes of the description, "Project' means the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment."47 As explained below, the Fox Comments highlight numerous deficiencies in the IS/MND's Project description.

### A. The IS/MND Fails to Fully Describe Battery Energy Storage Facility's Operation and Electricity Use

The IS/MND omits crucial details about how the batteries in the Battery Energy Storage System (BESS) will operate. Although the IS/MND suggests that the Project will store and use energy from renewable sources, it fails to include information on how it will do so or to include a commitment to charging the batteries with clean energy to the exclusion of more abundant fossil fuel resources. As explained in Section IV, this can lead to significant GHG and air quality impacts. Moreover, the IS/MND provides no information about gross or net generation of electricity to operate the facility. Without clear numbers regarding how much energy will be stored and what the expected energy output of the batteries will be, it is extremely hard for the public to accurately assess the emissions from operating the facility.

Relatedly, the IS/MND does not include vendor specifications for ancillary equipment to support the batteries, such as cooling systems, inverters,



<sup>&</sup>lt;sup>46</sup> City of Redlands v. County of San Bernardino (2002) 96 Cal.App.4th 398, 406 (internal quotations and citations omitted).

<sup>&</sup>lt;sup>47</sup> 14 C.C.R. § 15378(a).

<sup>&</sup>lt;sup>48</sup> IS/MND, p. 136; Fox Comments, p. 4.

<sup>&</sup>lt;sup>49</sup> Fox Comments, p. 7.

<sup>&</sup>lt;sup>50</sup> Fox Comments, p. 7.

transformers, and heating, ventilation, and air conditioning (HVAC) units.<sup>51</sup> The CalEEMod emissions model used by the IS/MND only accounts for emissions from lights and water supply and does not include emissions produced in relation to the electricity needed to operate this equipment.<sup>52</sup>

Furthermore, the IS/MND does not explain the function of components such as the inverters and transformers.<sup>53</sup> The voltages involved in charging and discharging the batteries need to be disclosed to calculate electricity demand.<sup>54</sup> The IS/MND even fails to state how many transformers will be in the substation.<sup>55</sup>

All this missing information renders the IS/MND deficient under CEQA because it hampers the public's ability to evaluate GHG and air quality impacts from the Project. "An accurate and complete project description is necessary for an intelligent evaluation of the potential environmental impacts of the [City]'s action." The MND fails to provide such a description.

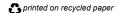
### B. The IS/MND Lacks Key Information Regarding Battery Layout and Composition

The IS/MND does not disclose the layout of the BESS despite the fact that fire codes indicate that spacing out combustible objects, setting up thermal barriers, using safe materials, and properly designing rack enclosures—among other safety measures—is critical to preventing fires.<sup>57</sup> The IS/MND fails to describe the fire suppression system that would be used to control accidents at the facility and resorts to uncertain language such as "may" when describing technologies that might be used.<sup>58</sup>

The Material Safety Data Sheet ("MSDS") for the batteries was not included with the IS/MND and only became available in response to a Public Records Act

<sup>&</sup>lt;sup>58</sup> Fox Comments, pp. 3–4.





<sup>&</sup>lt;sup>51</sup> Fox Comments, p. 6.

<sup>&</sup>lt;sup>52</sup> Fox Comments, p. 6.

<sup>&</sup>lt;sup>53</sup> Fox Comments, p. 6.

<sup>&</sup>lt;sup>54</sup> Fox Comments, p. 7.

<sup>&</sup>lt;sup>55</sup> Fox Comments, p. 7.

<sup>&</sup>lt;sup>56</sup> City of Redlands, 96 Cal.App.4th at 406.

<sup>&</sup>lt;sup>57</sup> Fox Comments, p. 3.

("PRA") request.<sup>59</sup> The MSDS does not commit the Project to using the lithium-ion batteries described therein.<sup>60</sup> Furthermore, the MSDS identifies the manufacturer as Trust Power Group while a memorandum obtained through the PRA request says Powin lithium ion batteries would be used.<sup>61</sup> Thus, there is uncertain and contradictory information in the description of something as fundamental as the exact origin of batteries that will be used in the BESS for the Project.

Relatedly, the IS/MND is silent on the impacts that could occur in the event of an accident.<sup>62</sup> The composition of the batteries being used and the fact that they contain hazardous chemicals should have been a central part of the Project description and is essential information for evaluating the environmental and health risks associated with accidental release of toxic chemicals into the air of the nearby community.<sup>63</sup> These impacts are discussed at length in Section VI.

The IS/MND therefore fails its fundamental purpose under CEQA as an informational document because it does not give information to adequately evaluate the environmental impacts that could result from battery fires or other accidents. Because "Project" is defined as a "direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment," the physical and technical aspects of the Project that are directly related to the environmental health risks presented by potential fires or other malfunctions are well within the scope of what should be described by the IS/MND.<sup>64</sup> An EIR must be prepared that will include a proper project description as required by CEQA.



<sup>&</sup>lt;sup>59</sup> Fox Comments, p. 4.

<sup>&</sup>lt;sup>60</sup> Fox Comments, p. 4.

<sup>&</sup>lt;sup>61</sup> Fox Comments, p. 4. Dr. Fox further indicates that Powin batteries have only been used in much smaller operating facilities, which suggests that it has "no experience with the proposed scale and scope of the Hummingbird Project." (*Id.* at p. 5.)

<sup>&</sup>lt;sup>62</sup> Fox Comments, p. 5.

<sup>&</sup>lt;sup>63</sup> Fox Comments, pp. 5–6.

<sup>&</sup>lt;sup>64</sup> 14 C.C.R. § 15378(a).

### C. The IS/MND Fails to Adequately Describe Transport, Storage, and Disposal of Batteries

Accidents could also occur during transport, on-site storage, and disposal. Yet the IS/MND does not disclose where the batteries will be manufactured, the means of transportation to the Project site, the transportation routes, how the batteries will be stored during construction, where and how the batteries will be recycled, and the routes and means of transportation to the recycling center. While the MSDS we received in response to our Public Records Act ("PRA") request suggests that the batteries will be manufactured in China, this is not stated explicitly in the IS/MND. A memorandum obtained through the PRA request indicates that Powin Energy is the battery manufacturer with operations near Portland, Oregon.

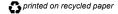
Regardless of the battery source, information about how the batteries will be transported and secured remains absent. Such information is crucial to proper evaluation of the environmental risks posed by a possible accident, especially given that the route will likely pass through densely populated areas of the San Francisco Bay Area. <sup>69</sup> The City must prepare an EIR to disclose this information and evaluate potential environmental impacts from an accident during shipping and handling.

#### D. The IS/MND Lacks Details about the Transmission Line

As with the substation discussed above, the IS/MND lacks basic information about the proposed 115 kV transmission line. To Missing information includes the number of circuits to be installed, the type of cable and/or conduit to be used for the 2.5-mile underground line, the physical space necessary for the underground transmission line, and the availability of underground space given other underground utilities such as gas, sewer, water, and telephone lines. The IS/MND says that the Project would use a 2-foot by 6-foot trench for the underground

<sup>&</sup>lt;sup>71</sup> Fox Comments, p. 7.





<sup>&</sup>lt;sup>65</sup> Fox Comments, p. 6.

<sup>&</sup>lt;sup>66</sup> Fox Comments, p. 6.

<sup>&</sup>lt;sup>67</sup> Fox Comments, p. 6.

<sup>&</sup>lt;sup>68</sup> Fox Comments, p. 46.

<sup>&</sup>lt;sup>69</sup> Fox Comments, p. 46.

<sup>&</sup>lt;sup>70</sup> Fox Comments, p. 7.

transmission line but provides no documentation that a trench of such size would adequately accommodate the 115 kV line.<sup>72</sup> Finally, the IS/MND fails to address the number of streetlight loop repairs that would be required due to trenching.<sup>73</sup> These are major oversights that require amendments to the IS/MND to provide necessary information to allow the public to fully comment on the effects of the Project.

# IV. SUBSTANTIAL EVIDENCE SUPPORTS A FAIR ARGUMENT THAT PROJECT OPERATIONS MAY RESULT IN POTENTIALLY SIGNIFICANT GREENHOUSE GAS (GHG) AND AIR QUALITY IMPACTS THAT THE IS/MND FAILS TO DISCLOSE AND MITIGATE

### A. The IS/MND Fails to Analyze Emissions of GHGs and Air Pollutants from the Project's Energy Use

CEQA requires agencies to analyze a project's energy impacts when "the project's energy use reveals that the project may result in significant environmental effects due to the wasteful, inefficient, or unnecessary use of energy...."<sup>74</sup> The CEQA Guidelines also state that the analysis of a project's energy impacts "should include the project's energy use for all project phases and components," and that relevant considerations include "the project's size, location, orientation, equipment use and any renewable energy features that could be incorporated into the project."<sup>75</sup> Further guidance for considering energy impacts is included in Appendix F of the Guidelines, which states that the energy analysis may include "[t]he effects of the project on peak and base period demands for electricity and other forms of energy," as well as "the effects of the project on energy resources."<sup>76</sup> The CEQA Guidelines also state that the energy analysis "may be included in related analyses," such as the GHG impact analysis.<sup>77</sup>

In addition to analyzing energy impacts, CEQA requires agencies to analyze GHG impacts. The CEQA Guidelines state that lead agencies "shall make a goodfaith effort, based to the extent possible on scientific and factual data, to describe,

<sup>&</sup>lt;sup>72</sup> Fox Comments, p. 7.

<sup>&</sup>lt;sup>73</sup> Fox Comments, p. 7.

<sup>&</sup>lt;sup>74</sup> 14 C.C.R. § 15126.2(b).

<sup>&</sup>lt;sup>75</sup> *Id*.

<sup>&</sup>lt;sup>76</sup> CEQA Guidelines, Appendix F: Energy Conservation, Section C(3); Section C(5).

<sup>&</sup>lt;sup>77</sup> 14 C.C.R. § 15126.2(b).

calculate or estimate the amount of greenhouse gas emissions resulting from a project."<sup>78</sup> "The agency's analysis also must reasonably reflect evolving scientific knowledge and state regulatory schemes."<sup>79</sup> CEQA further requires agencies to consider both direct and indirect GHG emissions and air quality impacts associated with a project.<sup>80</sup>

As explained below and in the Fox Comments, the IS/MND analysis fails to comply with this mandate in two ways. First, because it makes an unsupported claim that it will use and encourage the production of renewable energy when there is no evidence supporting this claim. In fact the evidence shows it us more likely to incentivize fossil-fuel based energy, leading to more GHG and air pollutant emissions. Second, the IS/MND does not account for all energy use of the project—most significantly it does not account for energy used for batteries charging and discharging.

The IS/MND claims the Project would "store clean energy (wind and solar)" <sup>81</sup> and that "[t]he energy storage capacity created as part of the project would assist the City and State of California in meeting their carbon-free electricity goals." <sup>82</sup> The IS/MND also contends that the Project will store clean energy "so peak-hour dependence on natural gas or coal-fired electricity could be lessened" and will store "excess energy" from electricity generation in the South Bay-Moss Landing area.

However, the MND/IS contains no mandatory conditions or mitigation measures that will guarantee that the Project will actually use and store renewable



<sup>&</sup>lt;sup>78</sup> *Id.* § 15064.4(a).

<sup>&</sup>lt;sup>79</sup> Id. § 15064.4(b); see also *Cleveland National Forest Foundation v. San Diego Assn. of Governments* (2017) 3 Cal.5th 497, 504 (holding that lead agencies have an obligation to track shifting regulations and to prepare CEQA documents in a fashion that keeps "in step with evolving scientific knowledge and state regulatory schemes").

<sup>&</sup>lt;sup>80</sup> See 14 C.C.R. § 15064(d) (evaluating significance of the environmental effect of a project requires consideration of reasonably foreseeable indirect physical changes caused by the project); 14 C.C.R. § 15358(a)(2) (defining "effects" or "impacts" to include indirect or secondary effects caused by the project and are "later in time or farther removed in distance, but are still reasonably foreseeable" including "effects on air"); CEQA Guidelines, Appendix G, § VII: Greenhouse Gas Emissions (stating agencies should consider whether the project would "generate greenhouse gas emissions, *either directly or indirectly*, that may have a significant impact on the environment.") (emphasis added); <sup>81</sup> IS/MND, p. 30.

<sup>82</sup> IS/MND, p. 6.

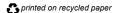
energy. In fact, for several reasons described below, including the Project's location; storage capacity and economic incentives for its operation, it is likely that the Project will incentivize production of more fossil-fuels based energy, by creating more demand in the form of storage capacity. This, in turn, will lead to more GHG and air pollutants emissions.<sup>83</sup>

First, the failure of the IS/MND to define "excess energy" renders it deficient as an informational document under CEQA.<sup>84</sup> As explained in the Fox Comments, because the grid is required to run with supply and demand balanced at all times, there technically is no such thing as excess energy.<sup>85</sup> One possibility of what the IS/MND intended is that it refers to energy capable of being produced but without the storage provided by the Project is being curtailed or not produced.<sup>86</sup> Yet, for the IS/MND to pursue its goal of supporting clean energy to reduce dependence on fossil fuel energy, there would need to be a commitment that the batteries will only be charged with renewable energy.<sup>87</sup> The IS/MND makes no such commitment.

The IS/MND also provides no assurances via mitigation measures that it will actually store excess energy generated by the electrical grid during the day to lessen natural gas demand when the sun goes down and solar power loses productivity.<sup>88</sup> The Fox Comments explain that commercial BESS projects are motivated by economic productivity and therefore store energy whenever grid prices are lowest and discharge energy whenever prices are highest to make a profit. Accordingly, it is unreasonable to expect storage of only clean energy without legally binding commitments to do so.<sup>89</sup> As the. Fox Comments highlight, limiting charging to daytime hours, hours when there is "excess" energy, and only allowing charging with electricity produced from renewable energy will prevent some economical charging and potentially limit the ability of the Project to discharge the full claimed 300 MWh of storage capacity.<sup>90</sup> Unless the IS/MND incorporates "enforceable conditions that will limit charging to daytime periods when there is otherwise-

<sup>90</sup> Fox Comments, p. 12.





<sup>83</sup> Fox Comments, p. 9.

<sup>84</sup> Fox Comments, p. 11.

<sup>85</sup> Fox Comments, p. 11.

<sup>&</sup>lt;sup>86</sup> Fox Comments, p. 11.

<sup>87</sup> Fox Comments, p. 11.

<sup>88</sup> IS/MND, pp. 7, 30; Fox Comments, p. 12.

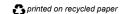
<sup>89</sup> Fox Comments, p. 12.

curtailed renewable energy available," there is no support to the claim that the Project will use renewable energy. Therefore, the City must prepare an EIR to analyze the significant GHG and air quality impacts from the BESS not being limited to using renewable energy for charging.<sup>91</sup>

Furthermore, the IS/MND needs to be amended to quantify the extent to which it will be able to store up to 300 MWh of electricity over the course of a year if it is not using CO<sub>2</sub>-emitting generation as its source of charging energy and explain how it can rely on electricity generated within the South Bay-Moss Landing area. The Fox comments show that 96 percent of the 2,377 MW of generation capacity in the South Bay-Moss Landing area is gas-fired and not renewable. In the absence of enforceable operating conditions to require sourcing of otherwise-curtailed renewable sources in the South Bay-Moss Landing area, it is completely baseless for the IS/MND to argue it will encourage renewable energy and to conclude that there will not be significant GHG and air quality impacts.

Thus, an EIR must be prepared to evaluate the GHG and air quality impacts that will be created by the Project's reliance on fossil-fuel energy. Alternatively, an EIR must be prepared to include sufficient binding conditions to guarantee the Project will in fact use and store renewable energy.

The IS/MND also fails to account for all energy use, and its correlating GHG and air pollution emission, of the Project. Using CalEEMod, the IS/MND estimates operational GHG emissions of 127.6 metric tons (MT) per year, 125 MT of which for electricity consumption by supporting equipment such as facility lighting, water heating, and air conditioning. However, the model fails to include other sources of energy consumption: first, it fails to include electricity required to operate equipment such as the inverters, transformers, switchgear, and other specialized BESS equipment. BESS equipment.



<sup>&</sup>lt;sup>91</sup> 14 C.C.R. § 15126.4(a)(2) ("Mitigation measures must be fully enforceable through permit conditions, agreements, or other legally-binding instruments.").

<sup>92</sup> Fox Comments, p. 13.

<sup>93</sup> Fox Comments, p. 14.

<sup>94</sup> IS/MND, p. 80 (Table 4.8-1).

<sup>95</sup> Fox Comments, p. 15.

Second, and more importantly, the IS/MND fails to account for the battery energy storage system (BESS) itself, "thereby significantly underestimating GHG and criteria pollutant (e.g., NOx) emissions." As explained in the Fox comments:

Batteries are imperfect instruments: energy is lost every time a battery is charged and discharged. This means that if a battery absorbs 1 MWh of electricity, it will discharge less than 1 MWh back to the grid. The ratio of how much the battery consumes during charging versus its production while discharging is referred to as the energy efficiency of the batteries.<sup>97</sup>

The Fox comments explain that the IS/MND fails to provide information regarding battery efficiency. However, based on information gathered from existing battery energy storage projects on the CAISO system, Mr. Marcus was able to calculate their efficiency and as a result, their energy consumption. He found that the Project's annual net energy consumption is 15.2 GWh.<sup>98</sup> This energy use and its impacts are entirely missing from the IS/MND. This means that the Project's actual GHG emissions and indirect pollutant emissions are significantly higher than what the IS/MND claims.

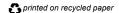
### B. There Is Substantial Evidence Supporting a Fair Argument that GHG, Air Quality, and Energy Impacts are Significant

As described above, the IS/MND estimated GHG emissions as 127.6 metric tons of CO<sub>2</sub> equivalents per year (MT CO<sub>2</sub>e/yr). The IS/MND than compared these emissions to a GHG significance threshold of 660 MT CO<sub>2</sub>e/yr, concluding no significant impact from GHG emissions. As described below, substantial evidence shows that the Project's GHG emissions are significantly higher and go well beyond the significance threshold utilized in the IS/MND.

As the Fox Comments explain, GHG emissions contribute to global climate change regardless of where they occur and criteria pollutant emissions can still be significant even if they are not emitted directly from the Project itself.<sup>99</sup> Operation

<sup>&</sup>lt;sup>99</sup> Fox Comments, p. 16.





<sup>96</sup> Fox Comments, pp. 9–10.

<sup>&</sup>lt;sup>97</sup> Fox Comments, p. 10.

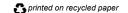
<sup>98</sup> Fox Comments, p. 11.

of the Project promotes increases in GHG emissions and other emissions elsewhere in California from generation of electricity to support the on-site facility and to charge the batteries. $^{100}$ 

The most glaring omission in the IS/MND analysis of GHG impact is in its failure to account for battery charging emissions. Mr. Marcus was able to calculate that existing battery energy storage projects on the CAISO system operate at about a 9.7 percent capacity factor and have a round-trip efficiency of approximately 80.7 percent. For the Project, those numbers translate to annual generation of 63.7 GWh/yr, annual charging energy requirements of 79 GWh/yr, and thus annual net energy consumption of 15.2 GWh/yr. 102

Accounting for approximated BESS energy losses of 15.2 GWh/yr and using the 1080 MW Moss Landing combined cycle power plant in the South Bay-Moss Landing area as a reference for emissions characteristics encouraged by the Project, Dr. Fox and Mr. Marcus estimate 5,682 MT/yr of GHG emissions. <sup>103</sup> Alternatively, using the IS/MND's calculations of 125 MT/yr associated with 0.36359 GWh/yr of electricity usage, Dr. Fox and Mr. Marcus use the battery-related net electricity consumption of 15.2 GWh/yr to estimate additional GHG emissions of 5,240 MT/yr. <sup>104</sup> Either way, the amount of GHG emissions greatly surpasses both the 127.6 MT/yr reported in the IS/MND and the 660 MT/yr significance threshold relied upon by the City's CEQA analysis. <sup>105</sup> The calculations in the Fox Comments also yield incremental emissions of 919 lb/yr of NO<sub>x</sub>, which the IS/MND fails to consider in its air quality analysis. <sup>106</sup>

The Fox Comments point out another flaw in the IS/MND analysis with regard to energy impacts: IS/MND Impact EN-2 incorrectly states that the Project would not conflict with state or local plans for renewable energy or energy efficiency



<sup>&</sup>lt;sup>100</sup> Fox Comments, p. 17.

<sup>&</sup>lt;sup>101</sup> CAISO Batteries Charging Data Spreadsheet. Exhibit 20 to Fox Comments; Phyllis Fox and Dave Marcus, Comments on the Draft Supplemental Environmental Impact Report for the LeConte Battery Energy Storage System, September 3, 2019. Exhibit 14 to Fox Comments.

<sup>&</sup>lt;sup>102</sup> Fox Comments, p. 17.

<sup>&</sup>lt;sup>103</sup> Fox Comments, pp. 17–18.

<sup>&</sup>lt;sup>104</sup> Fox Comments, p. 18.

<sup>&</sup>lt;sup>105</sup> Fox Comments, p. 18; IS/MND, p. 80 (Table 4.8-1).

<sup>&</sup>lt;sup>106</sup> Fox Comments, pp. 17–18.

because it would meet General Plan policies related to renewable energy and efficiency and would facilitate efforts to comply with California Renewable Portfolio Standards. <sup>107</sup> Rather, for the reasons explained above, the Project would "hamper compliance with RPS goals" and other clean energy policies by incentivizing gasfired generation. <sup>108</sup> Without suitable mitigation measures to ensure the BESS only utilizes renewable energy, the Project is likely to cause significant energy impacts triggering the need for an EIR under CEQA. <sup>109</sup>

As described above, substantial evidence shows that the Project may result in significant impacts from GHG, air pollutant emissions and energy use. Because CEQA requires evaluation of potentially significant indirect GHG and air quality impacts, an EIR must be prepared to analyze and mitigate those significant impacts.

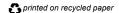
### C. The IS/MND Must Adopt Proper Mitigation Measures to Mitigate GHG Impacts

Because the IS/MND finds no significant impact from GHG emissions, it also fails to adopt any mitigation measures. The GHG analysis, however, includes some discussion of GHG reductions measures that purportedly apply to the Project, namely a "GHG Reduction Strategy" based on the City's General Plan for mitigation of GHG emissions. However, as explained in the Fox Comments, none of the measures cited will reduce GHG emissions from the Project. 111

The Land Use / Transportation Diagram consistency and pedestrian/bicycle site design measures are negligible sources of mitigation because the Project facility will be unmanned. Furthermore, implementation of Green Building Measures are irrelevant because the batteries will be installed in an existing building with no modifications to that building. Finally, the IS/MND erroneously claims the

<sup>&</sup>lt;sup>113</sup> Fox Comments, p. 19.





<sup>&</sup>lt;sup>107</sup> IS/MND, p. 66; Fox Comments, pp. 19–20.

<sup>&</sup>lt;sup>108</sup> Fox Comments, p. 20.

 $<sup>^{109}</sup>$  14 CCR  $\$  15126.2(b); CEQA Guidelines, Appendix F: Energy Conservation, Section C(3); Section C(5).

<sup>&</sup>lt;sup>110</sup> IS/MND, p. 81; Envision San José 2040: General Plan (2011).

<sup>&</sup>lt;sup>111</sup> Fox Comments, p. 19.

<sup>&</sup>lt;sup>112</sup> Fox Comments, p. 19.

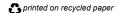
Project is consistent with the General Plan designation for the site because it is "not an energy-intensive use." <sup>114</sup> Yet, as explained above, the nature of energy storage is bound up with intensive energy use. <sup>115</sup> "The fact that roughly 80 percent of the energy use is then recovered when the batteries discharge does not change the energy-intensive nature of the Project." <sup>116</sup> The City must prepare an EIR that will properly analyze GHG emissions, and will include effective and enforceable mitigation to mitigate GHG impacts.

### D. Substantial Evidence Supports a Fair Argument that The Project's Cumulative GHG and Air Quality Impacts May be Significant

CEQA mandates that a lead agency find a project may have a significant effect on the environment and "thereby require an EIR to be prepared for the project where this is substantial evidence" that the project has "possible environmental effects that are individually limited but cumulatively considerable." Specifically, CEQA recognizes that incremental effects of an individual projects can be significant when viewed in connection with the effects of past projects, current projects, and probable future projects and therefore requires lead agencies to evaluate cumulative impacts from other projects with similar effects on the environment. An EIR must be prepared if the cumulative impact may be significant and the project's incremental effect, though individually limited, is cumulatively considerable. Even if the lead agency determines that a project's incremental contribution to a cumulative effect is not cumulatively considerable because the project complies with a previously approved plan or mitigation program, an EIR must be prepared if there is "substantial evidence that the possible effects of a particular project are still cumulatively considerable

 $<sup>^{118}</sup>$  Id.. § 15064(h)(1); see id. § 15065(a)(3) (defining "cumulatively considerable" as meaning that "the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects"); id. § 15355 ("Cumulative impacts' refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.")  $^{119}$  Id. § 15064(h)(1).





<sup>&</sup>lt;sup>114</sup> IS/MND, p. 81.

<sup>&</sup>lt;sup>115</sup> Fox Comments, p. 19.

<sup>&</sup>lt;sup>116</sup> Fox Comments, p. 19.

<sup>&</sup>lt;sup>117</sup> 14 C.C.R. § 15065(a)(3).

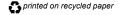
notwithstanding that the project complies with the specified plan or mitigation program."<sup>120</sup> Moreover, "[w]hen relying on a plan, regulation or program, the lead agency should explain how implementing the particular requirements in the plan, regulation or program ensure that the project's incremental contribution to the cumulative effect is not cumulatively considerable."<sup>121</sup>

The IS/MND claims that all cumulative impacts will be less than significant but fails to adequately explain why compliance Standard Permit conditions and City policies will ensure impacts are not cumulatively considerable. Moreover, the IS/MND fails to identify or analyze any other projects in the area that could lead to cumulatively considerable impacts. Therefore, it fails to follow either of the options offered by CEQA for an adequate cumulative impact analysis. 123

The Fox Comments analyzed the potential for cumulatively considerable impacts in light of a construction boom in the South Bay Area. <sup>124</sup> About 68 projects are planned within the City and in the adjacent City of Santa Clara between 2019 and 2030. <sup>125</sup> The Fox Comments evaluated cumulative reactive organic gas (ROG) and NO<sub>x</sub> emissions and GHG emissions from the Project and five data center projects. <sup>126</sup> Dr. Fox selected data centers because they emit the same pollutants associated with this Project, including ROG, NO<sub>x</sub>, and GHGs and are located in the same air basin as the Project. <sup>127</sup> The analyses concluded that cumulative mitigated annual ROG emissions and cumulative mitigated daily ROG and NO<sub>x</sub> emissions are significant. <sup>128</sup> Dr. Fox also concluded that cumulative annual GHG emissions are significant. Dr. Fox's analyses constitute substantial evidence showing that

<sup>&</sup>lt;sup>128</sup> Fox Comments, pp. 21–23.





<sup>120</sup> Id. § 15064(h)(3).

 $<sup>^{121}</sup>$  Id.; see id. § 15130(a) (stating that the lead agency shall describe its basis for concluding that an incremental effect is not cumulatively considerable).

<sup>&</sup>lt;sup>122</sup> IS/MND, pp. 30, 136.

<sup>&</sup>lt;sup>123</sup> *Id.* § 15130(b), stating that an adequate discussion of significant cumulative impacts must include either (A) list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or (B) A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect.

<sup>&</sup>lt;sup>124</sup> Fox Comments, p. 20.

<sup>&</sup>lt;sup>125</sup> Fox Comments, pp. 21–22.

<sup>&</sup>lt;sup>126</sup> Fox Comments, pp. 21–25.

<sup>&</sup>lt;sup>127</sup> Fox Comments, pp. 20–21. See also 14 C.C.R. § 15130(b)(2).

compliance with the City's General Plan is not sufficient to ensure impacts are not cumulatively considerable. The results of her analyses are summarized in the tables below.

Table 1: Cumulative Mitigated Annual Emissions (ton/yr)

Project	ROG	NOx	PM10	PM2.5
Hummingbird	0.46	0.48	0.001	0.001
Stack	1.8	9.9	0.2	0.1
Equinix	-1.2	6.6	-0.5	-0.3
San Jose	4.6	-4.71	0.25	0.21
Laurelwood	6.2	-2.3	0.18	0.16
Total	11.9	9.97	0.13	0.17
Significance Threshold (ton/yr)	10	10	15	10
Significant?	Yes	No	No	No

Table 2: Cumulative Mitigated Daily Emissions (lb/day)

Project	ROG	NOx	PM10	PM2.5
Hummingbird	2.5	2.6	0.007	0.007
Stack	8.8	51.9	1.0	0.4
Equinix	4.7	49.1	6.2	2.4
San Jose	25.3	-26.2	1.37	1.17
Laurelwood	33.9	560	1.18	1.07
Sequoia	16.3	23.8	0.23	0.22
Total	91.5	661.2	9.99	5.27
Significance Threshold (lb/day)	54	54	82	54
Significant?	Yes	Yes	No	No

Table 3: Cumulative Greenhouse Gas Emissions: Data Centers (MTCO<sub>2</sub>e/yr)

Project	GHG
Hummingbird	5,810
Stack	9,489
Equinix	-
San Jose	3,529
Laurelwood	6,142
Sequoia	4,301
Total	29,271
Significance Threshold (ton/yr)	660
Significant?	Yes

The cumulative annual ROG significance threshold of 10 tons/yr is exceeded by the estimate of 11.9 tons/yr for mitigated ROG emissions. <sup>129</sup> The cumulative daily emissions threshold of 54 lb/day for both ROG and NOx are exceeded by the estimate for cumulative mitigated daily emissions for each pollutant. <sup>130</sup> The Fox Comments estimate ROG emissions of 91.5 lb/day and NOx emissions of 661.2 lb/day. <sup>131</sup> Finally, cumulative GHG emissions of 29,271 MT CO<sub>2</sub>/yr greatly surpass the 660 MT CO<sub>2</sub>/yr significance threshold used by the IS/MND. <sup>132</sup> Thus, there is substantial evidence supporting a fair argument of cumulatively considerable air quality and GHG emissions impacts, necessitating the preparation of an EIR.

<sup>&</sup>lt;sup>129</sup> Fox Comments, pp. 23–24.

<sup>&</sup>lt;sup>130</sup> Fox Comments, p. 24.

<sup>&</sup>lt;sup>131</sup> Fox Comments, p. 24.

<sup>&</sup>lt;sup>132</sup> Fox Comments, p. 25.

## V. SUBSTANTIAL EVIDENCE SUPPORTS A FAIR ARGUMENT THAT CONSTRUCTION HEALTH RISK AND HAZARD IMPACTS ARE SIGNIFICANT

The MND states that "Construction activity is expected to have less than significant impacts in terms of construction impacts associated with exposure of sensitive receptors to TACs and PM2.5," summarily explaining that "construction activities near sensitive receptors …is expected to be temporary activities at any one location" and that "if best management practices (described above as Standard Permit Conditions) are implemented" the impacts will be less than significant. <sup>133</sup>

Using the estimated emissions of PM2.5 from the IS/MND's Air Quality Analysis in Appendix A, Dr. Fox and Mr. Kapahi modeled hazards impacts from PM2.5.<sup>134</sup> Their analysis showed exceedance of BAAQMD's significance threshold of 0.3 µg/m³ for annual average PM2.5 emissions at several locations around the Project site.<sup>135</sup> This is substantial evidence supporting a fair argument that construction health hazards are significant and an EIR should be prepared. Dr. Fox and Mr. Kapahi point out that their analysis is not even reflective of the real magnitude of the impact, because it is based on the CalEEMod analysis which underestimated PM2.5 emissions, for several reasons.

A spreadsheet with data supporting the Air Quality Appendix that we obtained from a PRA request indicates that construction would occur between 7:00 a.m. and 7:00 p.m. even though the IS/MND's CalEEMod analysis assumed an 8-hour workday. There are also inconsistencies between the amounts of paving and paving demolition required during construction. The CalEEMod model does not include PM2.5 emissions from windblown dust from graded areas and storage piles and fugitive dust from off-road travel. As the Fox Comments explain, these emissions should have been separately calculated and added to the CalEEMod

<sup>&</sup>lt;sup>133</sup> IS/MND, pp. 32–33.

 $<sup>^{134}</sup>$  Fox Comments, pp. 25–27; Memo re Air Quality Impacts by Illingworth & Rodkin, Inc. (August 9, 2019) ("Air Quality Appendix").

<sup>&</sup>lt;sup>135</sup> Fox Comments, pp. 25–27.

<sup>&</sup>lt;sup>136</sup> Fox Comments, p. 26; Exhibit 19 to Fox Comments.

<sup>&</sup>lt;sup>137</sup> Fox Comments, p. 26.

<sup>&</sup>lt;sup>138</sup> Fox Comments, p. 26.

totals.<sup>139</sup> The failure to include these additional sources of emissions that are not accounted for by CalEEMod mean the IS/MND's PM2.5 analysis is greatly underestimating the impacts.

In sum, even a conservative analysis points out an obvious health risk from PM2.5. An EIR must be prepared that will correct the CalEEMod analysis flaws described above and properly analyze and mitigate health impacts from PM2.5

Moreover, the IS/MND did not evaluate construction health impacts from diesel particulate matter (DPM) emitted by construction equipment. The Office of Environmental Health Hazard Assessment (OEHHA) risk assessment guidelines require a formal risk assessment for short-term construction exposures lasting longer than two months. The IS/MND estimates that the total construction period will be about six months. The Fox Comments conclude that the duration of construction along with the proximity of identified sensitive receptors means that a health risk assessment should have been prepared for the Project. The failure to do so renders the IS/MND deficient as a CEQA informational document.

Assuming that the cancer and acute health impacts from DPM, equal to PM2.5, would be significant for on-site construction workers and nearby residents, Dr. Fox and Mr. Kapahi modeled construction exhaust in the area over the sixmonth construction period. Modeling yielded significant cancer risks greater than the threshold of 10 in one million on the Project site and at nearby commercial facilities surrounding the BESS. And as explained above with regard to PM2.5, these emissions are underestimated and cancer risks would be even greater when the errors in the CaleEMod analysis are corrected. As a result, there is substantial

<sup>&</sup>lt;sup>139</sup> Fox Comments, p. 26.

<sup>&</sup>lt;sup>140</sup> Fox Comments, p. 27.

<sup>&</sup>lt;sup>141</sup> Office of Environmental Health Hazard Assessment (OEHHA), Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments, February 2015 (OEHHA 2015), Section 8.2.10: Cancer Risk Evaluation of Short Term Projects, pp. 8-17/18; available at https://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0.

<sup>&</sup>lt;sup>142</sup> IS/MND, p. 32.

<sup>&</sup>lt;sup>143</sup> Fox Comments, p. 28.

<sup>&</sup>lt;sup>144</sup> Fox Comments, p. 29.

<sup>&</sup>lt;sup>145</sup> Fox Comments, p. 29.

evidence supporting a fair argument of significant health impacts due to construction that must be analyzed in an EIR.

## VI. SUBSTANTIAL EVIDENCE SUPPORTS A FAIR ARGUMENT THAT OPERATIONAL HEALTH RISKS FROM HAZARDOUS MATERIALS IMPACTS ARE SIGNIFICANT AND UNMITIGATED

A. The IS/MND Fails to Analyze the Hazardous Nature of the Materials Used in the Energy Storage Batteries or Conduct a Health Risk Assessment for a Possible Battery Accident

As described above in Section III, the IS/MND neglects to include key information about the composition of the batteries, the layout of the facilities, and the safety measures to be taken to mitigate the risk of accidents that can release hazardous materials into the surrounding community. The Fox Comments explain that fires and explosions have occurred at existing BESS facilities as a result of overcharging, short-circuiting, manufacturing defects, battery aging, thermal runaway, and malfunctioning of the cooling system. 146 Lithium-ion batteries are sensitive to high temperatures, overcharge, over-discharge, and short circuiting. 147 "The loss of a single battery can rapidly cascade to surrounding batteries, resulting in a large fire."148 Even in the absence of battery defects, natural disasters and nearby accidents that damage electrical infrastructure can trigger explosions and fires in BESS facilities. 149 The Fox Comments estimate, using a report on a fire at the battery facility in Flagstaff, Arizona, that an explosion at a facility with the capacity of this Project would be equivalent to 65 tons of TNT—enough to "seriously damage the adjacent commercial properties and nearby residential neighborhoods, resulting in mortality of nearby residents and workers from the blast."150 In addition to the inherent risks of explosions and fires themselves, battery fires

<sup>&</sup>lt;sup>146</sup> Fox Comments, pp. 29–37. In her full comments, Dr. Fox discusses specific examples of accidents at existing BESS facilities in Korea, Belgium, the United Kingdom, Hawaii, and Arizona. (*Id.* at 32–37.)

<sup>&</sup>lt;sup>147</sup> Fox Comments, p. 29.

<sup>&</sup>lt;sup>148</sup> Fox Comments, p. 31.

<sup>&</sup>lt;sup>149</sup> Fox Comments, pp. 31–32.

<sup>&</sup>lt;sup>150</sup> Fox Comments, pp. 36–37.

produce poisonous gases and other hazardous air pollutants that can have severe health consequences for firefighters and nearby people.<sup>151</sup>

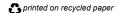
Yet the IS/MND says nothing about how these risks of fire, explosion, and toxic gas release would be prevented during transport, construction, and operation of the facility. CEQA Guidelines section 15126.2(d) requires a discussion of significant irreversible environmental change that could be caused by a project, including potential environmental accidents associated with the project. hoperate and accidents associated with the project. Appendix G of the CEQA Guidelines provides a list of potential hazards and hazardous materials impacts agencies should analyze, including the potential for reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Despite that, the IS/MND completely failed to analyze the potential for fire, explosion, and toxic gas release posed by battery storage projects such as this Project. The hazardous materials impact analysis is limited to studying soil contamination on the site and does not even consider the potential dangers posed by the batteries themselves.

As discussed above with regard to deficiencies in the IS/MND's Project description, the failure to evaluate handling and transportation of the batteries is violative of CEQA.<sup>155</sup> Given that the batteries will likely either come from Portland, Oregon or China and that batteries are sensitive to damage during handling and transport, the IS/MND should have considered these issues as part of its hazardous materials and health risk analyses.<sup>156</sup> The IS/MND also does not evaluate the risks of fires, explosions, and release of toxic gases during operation of the BESS facility.

As detailed below, the Fox Comments provide substantial evidence showing potentially significant impacts from modeling a battery accident at the proposed Project site releasing hazardous materials into the air., the failure to evaluate battery fires, explosions, or release of toxic gases during travel, storage, or use of the batteries renders the IS/MND inadequate under CEQA. An EIR must be prepared to consider these potentially irreversible environmental impacts.

<sup>&</sup>lt;sup>156</sup> Fox Comments, pp. 46, 50.





<sup>&</sup>lt;sup>151</sup> Fox Comments, pp. 32–37.

<sup>&</sup>lt;sup>152</sup> 14 C.C.R. § 15126.2(d).

<sup>&</sup>lt;sup>153</sup> CEQA Guidelines, Appendix G, § VIII: Hazards and Hazardous Materials.

<sup>&</sup>lt;sup>154</sup> IS/MND, pp. 89–91.

<sup>&</sup>lt;sup>155</sup> Fox Comments, pp. 46–47.

B. Health Risk Modeling by Dr. Fox and Mr. Kapahi Constitutes Substantial Evidence Supporting a Fair Argument that a Battery Accident During Operation of the Project Could Produce Significant Health and Hazardous Materials Impacts

Dr. Fox and Mr. Kapahi modeled possible accident scenarios and estimated acute health impacts for two hazardous air pollutants: hydrogen fluoride ("HF") and hydrogen cyanide ("HCN").<sup>157</sup> They advise, however, that an EIR should be prepared to evaluate the cumulative impacts of *all* hazardous air pollutants that would be present in the fumes from a BESS fire.<sup>158</sup>

The risks of both HF and HCN are well-documented.<sup>159</sup> HF may result from contact between water and a widely used electrolyte salt in batteries and is very toxic in confined spaces.<sup>160</sup> The IS/MND fails to identify the solvent used in the batteries and a memorandum obtained in a PRA request suggests that water may be used as part of a fire suppression system.<sup>161</sup> HCN has acute impacts to respiratory, central nervous, and cardiovascular systems.<sup>162</sup> A few breaths at high concentrations can lead to rapid cessation of respiration and continued exposure can lead to death.<sup>163</sup>

Analyses conducted for fire involving 10 percent of battery cells illustrate that acute hazard indices for both HF and HCN exceed the significance threshold of 1 over the entire 1.5-mile modeling domain. Hay Many homes and businesses would have hazard indices exceeding 10. He Fox Comments explain that this would result in significant acute health impacts at all sensitive receptors in the Project area. He

<sup>&</sup>lt;sup>157</sup> Fox Comments, pp. 37–46.

<sup>&</sup>lt;sup>158</sup> Fox Comments, p. 38.

<sup>&</sup>lt;sup>159</sup> Fox Comments, pp. 38–40.

<sup>&</sup>lt;sup>160</sup> Fox Comments, pp. 38–40.

<sup>&</sup>lt;sup>161</sup> Fox Comments, pp. 39–40.

<sup>&</sup>lt;sup>162</sup> Fox Comments, p. 40.

<sup>&</sup>lt;sup>163</sup> Fox Comments, p. 40.

<sup>&</sup>lt;sup>164</sup> Fox Comments, pp. 40–41.

<sup>&</sup>lt;sup>165</sup> Fox Comments, p. 40.

<sup>&</sup>lt;sup>166</sup> Fox Comments, p. 40.

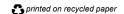
Modeling of HCN release for fires involving 50 percent and 100 percent of battery cells yield even more startling results. Dr. Fox and Mr. Kapahi used varying wind conditions for the models and found mortality or serious health impacts would occur in all cases. With 50 percent of cells damaged, 293 pounds of HCN would be released. Mortality would occur at nearby commercial properties and acute health impacts would occur over a much larger area. Mortality would also likely extend into the residential area north of the freeway if measured from the edge of the BESS. 170 In the worst case scenario of 100 percent of cells releasing HCN, 593 pounds of HCN would be released. To Pr. Fox's figures in her full letter illustrate the substantial area that would likely lead to fatalities.

The IS/MND does not acknowledge these significant acute hazards and health impacts to sensitive receptors. The Fox Comments present substantial evidence supporting a fair argument that these impacts may be significant. The City must prepare an EIR to address the severe health consequences of a potential failure of the batteries used in this facility and adopt suitable mitigation measures to reduce the risk of such accidents.

## VII. SUBSTANTIAL EVIDENCE SUPPORTS A FAIR ARGUMENT THAT THE PROJECT MAY HAVE SIGNIFICANT IMPACTS ON BIOLOGICAL RESOURCES

### A. The IS/MND Fails to Adequately Mitigate Potentially Significant Construction Impacts to Western Pond Turtles

The IS/MND's Biological Resources Report explains that there are 18 species within the Santa Clara Valley Habitat Plan ("VHP") area. 173 The IS/MND seeks to



<sup>&</sup>lt;sup>167</sup> Fox Comments, pp. 40–46.

<sup>&</sup>lt;sup>168</sup> Fox Comments, p. 45.

<sup>&</sup>lt;sup>169</sup> Fox Comments, pp. 45–46.

<sup>&</sup>lt;sup>170</sup> Fox Comments, p. 45.

<sup>&</sup>lt;sup>171</sup> Fox Comments, p. 43.

<sup>&</sup>lt;sup>172</sup> Fox Comments, pp. 43–45 (Figures 5 & 6).

<sup>&</sup>lt;sup>173</sup> Hummingbird Energy Storage Project Biological Resources Report prepared by H.T. Harvey & Associates (December 23, 2019) ("Biological Resources Report"), p. 47.

comply with the conditions of the VHP to mitigate impacts to those 18 covered species to below significant levels. 174

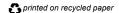
In particular, the IS/MND acknowledges that Western Pond Turtles or their eggs that are present in work areas "may be harmed or killed due to crushing by construction personnel or equipment, or as a result of desiccation or burying (e.g., during grading), but claims that compliance with VHP Conditions 3, 7, and 11 will mitigate the impact.

However, the IS/MND fails to explain *how* implementation of VHP Conditions 3, 7, and 11 will prevent turtles or their nests from being harmed or killed by construction workers or equipment.<sup>175</sup> Under CEQA, even where a public agency has demonstrated compliance with a plan or regulatory standard, that public agency must still consider evidence that a significant effect may occur under the fair argument standard.<sup>176</sup>

As Mr. Cashen explains, none of the conditions laid out by the habitat plan commits to the necessary measures to prevent the significant impacts to pond turtles recognized by the IS/MND.<sup>177</sup> Condition 3 is limited to measures designed to maintain hydrology and protect water quality.<sup>178</sup> Condition 7 contains a list of design and construction requirements, but none of them would mitigate risks of crushed turtles and eggs posed by construction personnel and equipment.<sup>179</sup> Condition 11 prohibits project activities within a stream setback zone.<sup>180</sup> The IS/MND and its Biological Resources Report in Appendix B call for a 100-foot buffer (less than the 150-foot standard setback for Coyote Creek), however, Mr. Cashen explains that pond turtles may use habitat as far as 500 meters (1,640 feet) from a watercourse.<sup>181</sup> Furthermore, the IS/MND concedes that Project construction

<sup>&</sup>lt;sup>181</sup> IS/MND, pp. 36, 51–52; Biological Resources Report, pp. 50–51; Cashen Comments, p. 2.





<sup>&</sup>lt;sup>174</sup> IS/MND, pp. 35–36.

<sup>&</sup>lt;sup>175</sup> IS/MND, p. 47; Cashen Comments, p. 2.

<sup>&</sup>lt;sup>176</sup> 14 C.C.R. §§ 15064(a)(1), (b)(2); see also *Mejia v. City of Los Angeles* (2005) 130 Cal.App.4th 322, 342 ("A public agency cannot apply a threshold of significance or regulatory standard 'in a way that forecloses the consideration of any other substantial evidence showing there may be a significant effect.").

<sup>&</sup>lt;sup>177</sup> Cashen Comments, p. 2.

<sup>&</sup>lt;sup>178</sup> Cashen Comments, p. 2.

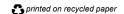
<sup>&</sup>lt;sup>179</sup> Cashen Comments, p. 2.

<sup>&</sup>lt;sup>180</sup> Cashen Comments, p. 2.

activities will occur within the stream setback zone. $^{182}$  This nullifies the ability of Condition 11 to prevent impacts to turtles that occur within that zone. $^{183}$ 

The IS/MND's reliance on these ineffective mitigation measures to claim reductions in impacts to pond turtles below significant levels violates CEQA. 184 CEQA requires that public agencies adopt feasible mitigation measures that are enforceable through permit conditions, agreements, or other legally-binding instruments to substantially lessen significant environmental impacts. 185 Because Mr. Cashen has presented a fair argument that the measures used by the IS/MND will not prevent significant impacts to pond turtles from construction, the City has not complied with CEQA.

Mr. Cashen proffers four measures to which the City should commit if it wishes to mitigate impacts: "(a) preconstruction surveys for turtles and turtle nests in the work area; (b) translocation of any turtles that occur in the work area; (c) buffers around any turtle nests that are discovered in the work area; and (d) installation of exclusion fencing to prevent turtles from entering the work area after it has been cleared of turtles." Rather than being part of a general habitat plan, these measures are tailored to identify the presence of turtles and their nests, move turtles to safety, and mitigate risks construction personnel and equipment pose to this special-status species. In the absence of a clear commitment to incorporate such mitigation measures into the Project plan, Mr. Cashen presents substantial evidence supporting a fair argument that potentially significant impacts to the pond remain unmitigated. An EIR must be prepared to address these impacts.



<sup>&</sup>lt;sup>182</sup> IS/MND, p. 52.

<sup>&</sup>lt;sup>183</sup> Cashen Comments, p. 2.

<sup>&</sup>lt;sup>184</sup> See *Kings County Farm Bureau*, 221 Cal.App.3d at 727–728 (CEQA document cannot rely on infeasible or ineffective mitigation measures).

<sup>&</sup>lt;sup>185</sup> 14 C.C.R. § 15126.4; Pub. Res. Code §§ 21002, 21081(a), 21100(b)(3).

<sup>&</sup>lt;sup>186</sup> Cashen Comments, p. 2.

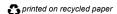
### B. The IS/MND Mischaracterizes the Likelihood of Occurrence of Golden Eagles and Fails to Adequately Mitigate Potentially Significant Transmission Line Collision Impacts to Various Bird Species

The Biological Resources Report states that there is no suitable nesting or foraging habitat for golden eagles at the Project site and therefore concludes that the species is absent. <sup>187</sup> Mr. Cashen explains that this conclusion is contradicted by evidence from online databases and within the IS/MND Biological Resources Report itself. <sup>188</sup> Specifically, golden eagles have been sighted over Coyote Creek and the Metcalf Energy Center and nest in large trees and occasionally electrical transmission towers. <sup>189</sup> The Biological Resources Report also acknowledges that creatures on which golden eagles prey are known to occur in the grassland habitat along the Project alignment. <sup>190</sup> As such, the IS/MND fails to analyze impacts to golden eagles based on a faulty conclusion that they will not occur there.

The IS/MND also neglects to evaluate the impact of the overhead transmission line on birds through collisions and electrocutions. Overhead power lines are "a major source of bird mortality" with between 12 million and 64 million birds killed annually at power lines in the United States. <sup>191</sup> Electrocution from, and collision with, transmission lines is one of the leading causes of golden eagle mortality. <sup>192</sup> The species is extremely sensitive to these impacts because golden eagles occur at very low densities, a relatively high percentage of young golden eagles do not survive to breeding age, and the population is already declining. <sup>193</sup> Any Project-related take of a golden eagle without a take permit from the U.S. Fish and Wildlife Service would violate the Bald and Golden Eagle Protection Act. <sup>194</sup>

<sup>&</sup>lt;sup>194</sup> 16 U.S.C. § 668 (prohibiting the "take" of golden eagles); 16 U.S.C. § 668c (defining "take" to include among other things kill, wound, or disturb); Cashen Comments, p. 5.





<sup>&</sup>lt;sup>187</sup> Biological Resources Report, p. 41.

<sup>188</sup> Cashen Comments, pp. 2-3.

<sup>&</sup>lt;sup>189</sup> Cashen Comments, pp. 2–3; Biological Resources Report, p. 41.

<sup>&</sup>lt;sup>190</sup> Cashen Comments, p. 3; Biological Resources Report, p. 21.

<sup>&</sup>lt;sup>191</sup> Cashen Comments, p. 4.

<sup>&</sup>lt;sup>192</sup> Cashen Comments, p. 5.

<sup>&</sup>lt;sup>193</sup> Cashen Comments, p. 5.

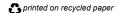
While the IS/MND acknowledges that birds may collide with transmission lines, its analysis of the issue is dismissive of possible significant impacts. <sup>195</sup> It argues that placing the new overhead line at a "similar height" to and "relatively close to the existing lines crossing the creek" will render potential impacts less than significant. <sup>196</sup> However, Mr. Cashen explains that the IS/MND is misleading when it says "relatively close to the existing lines" as the lines will be placed 780 feet apart. <sup>197</sup> Placing another set of transmission lines across Coyote Creek at a similar height 780 away from the first set of transmission lines could actually *heighten* the threat to birds as it would require birds in flight to maneuver *twice* to avoid the lines. <sup>198</sup> The Avian Power Line Interaction Committee ("APLIC") characterizes such a transmission line siting decision as a "risk situation." <sup>199</sup>

Therefore, the IS/MND should commit to APLIC guidelines for bird-friendly design strategies to reduce avian collisions and electrocutions.<sup>200</sup> APLIC strategies include conducting more studies of birds in the area, clustering power lines closer together, and other design strategies such as spacing between phases conductors.<sup>201</sup> The IS/MND does not require the Project to implement any of the strategies outlined by APLIC guidelines.<sup>202</sup>

CEQA establishes a duty for public agencies to adopt feasible mitigation measures that would substantially lessen any significant effects that the project would have on the environment.<sup>203</sup> Failure to incorporate feasible mitigation measures to substantially lessen significant effects from the overhead transmission line to avian species such as the APLIC standards thus amounts to a violation of CEQA. Moreover, given the protected status of golden eagles and their unique biological sensitivity described by Mr. Cashen, there is more than a fair argument of significant impacts that are unmitigated. Therefore, an EIR must be prepared.

<sup>&</sup>lt;sup>203</sup> Pub. Res. Code § 21002; 14 C.C.R. § 15021(a)(2).





<sup>&</sup>lt;sup>195</sup> IS/MND, p. 47; Cashen Comments, p. 5.

<sup>&</sup>lt;sup>196</sup> IS/MND, p. 47.

<sup>&</sup>lt;sup>197</sup> IS/MND, p. 47; Cashen Comments, p. 5.

<sup>&</sup>lt;sup>198</sup> Cashen Comments, p. 5.

<sup>&</sup>lt;sup>199</sup> Cashen Comments, p. 5.

<sup>&</sup>lt;sup>200</sup> Cashen Comments, pp. 4–5.

<sup>&</sup>lt;sup>201</sup> Cashen Comments, p. 5.

<sup>&</sup>lt;sup>202</sup> Cashen Comments, pp. 5–6.

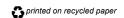
# VIII. SUBSTANTIAL EVIDENCE SUPPORTS A FAIR ARGUMENT THAT THE PROJECT CONSTRUCTION MAY RESULT IN SIGNIFICANT NOISE IMPACTS THAT THE IS/MND FAILS TO DISCLOSE AND MITIGATE

A. The IS/MND's Noise Analysis Improperly Concludes that Noise Impacts from Underground Construction will be Less Than Significant Because Impacts Will Occur for Less Than a Year

The IS/MND cites to the City's General Plan and Municipal Code to conclude that even though underground construction noise is calculated to exceed the significance threshold, the impacts are less than significant because the noise impacts will be experienced for less than one year.  $^{204}$  The IS/MND's Noise Study in Appendix E summarized Significance Criteria for temporary noise impacts as follows: "Hourly average noise levels during construction that would exceed 60 dBA  $L_{\rm eq}$  at residential land uses or exceed 70 dBA  $L_{\rm eq}$  at commercial land uses and exceed the ambient noise environment by at least 5 dBA  $L_{\rm eq}$  for a period of more than one year would constitute a significant temporary noise increase in the project vicinity."  $^{205}$ 

The Noise Study indicates that during the installation of the underground portion of the transmission line, noise levels associated with the construction along Monterey Road will be 84 to 97 dBA  $L_{\rm eq}$  at the nearest residences located 20 feet from the transmission line alignment. Given that the Noise Study reports existing daytime noise levels ranging from 63 to 70 dBA  $L_{\rm eq}$ , the average

<sup>206</sup> Noise Study, p. 18.



<sup>&</sup>lt;sup>204</sup> IS/MND, pp. 106–108; Envision San José 2040: General Plan (2011), Chapter 3: Environmental Leadership, pp. 40–41; San José Municipal Code § 20.30.700. Environmental Considerations Policy ("EC") 1.7 in the General Plan says that the City considers significant construction noise impacts to occur if a project located within 500 feet of residential uses would involve substantial noise generating activities continuing for more than 12 months. Table EC-1 establishes conditional exterior noise exposure thresholds of 60 dBA for residential land uses and 70 dBA for commercial land uses. Chapter 20.30.700 of the Municipal Code states that sound pressure levels generated by any combination of uses shall not exceed 55 dBA at any property line shared with land zoned for residential use, except upon issuance of and compliance with a Conditional Use Permit.

<sup>205</sup> Hummingbird Energy Storage Project Noise and Vibration Assessment (August 12, 2019) ("Noise Study"), p. 11.

construction noise at the nearest residence will be 14 to 27 dBA above the upper end of the ambient range and 17 to 30 dBA above the middle of the range.<sup>207</sup> Mr. Watry relies on the "commonly-held relationship" cited by the Noise Study that a 10 decibel increase is perceived as approximately doubling of loudness to conclude that the average construction noise levels at the closest residences along Monterey Road will be three to eight times louder than the existing average ambient.<sup>208</sup> Such a "substantial temporary increase" is indicative of significant noise impacts deserving of close analysis and mitigation in an EIR.<sup>209</sup>

Relatedly, the Noise Study states that fluctuating outdoor noises above 60 dBA interfere with speech.<sup>210</sup> Mr. Watry concludes that because calculated levels are 24 to 37 dBA higher than that threshold indicates, "speech in the backyards of nearby residences will be difficult, if not impossible, during construction."<sup>211</sup>

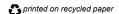
Yet the IS/MND concludes these impacts are not significant because the total underground construction period is anticipated to be six months with construction activities gradually traveling down the path of the transmission line. <sup>212</sup> The IS/MND reasons that "any single residence along the corridor would be exposed to noisy construction activities for a period of two months or less." <sup>213</sup>

As Mr. Watry explains, the short-term nature of this noise does not render it insignificant, especially given how loud and disruptive the City's own analysis reveals the construction will be. While Environmental Considerations Policy 1.7 from the City's General Plan is:

rightfully interpreted to indicate that any heavy construction that lasts more than one year is *a priori* significant, . . . that does not preclude shorter durations from also being significant if the noise levels otherwise warrant.

<sup>&</sup>lt;sup>213</sup> IS/MND, p. 110–111.





 $<sup>^{207}</sup>$  Noise Study, pp. 11, 18. The upper end of ambient range is 70 dBA  $L_{eq}$  which is 14 dBA less than 84 and 17 dBA less than 97. The middle of the ambient range is about 67 dBA  $L_{eq}$  which is 17 dBA less than 84 and 30 dBA less than 97.

<sup>&</sup>lt;sup>208</sup> Watry Comments, p. 2; Noise Study, p. 2.

<sup>&</sup>lt;sup>209</sup> Watry Comments, p. 2.

<sup>&</sup>lt;sup>210</sup> Noise Study, p. 3.

<sup>&</sup>lt;sup>211</sup> Watry Comments, p. 2.

<sup>&</sup>lt;sup>212</sup> IS/MND, p. 110–111.

EC 1.7 does not say that noise impacts from short-term construction under 12 months are necessarily insignificant."<sup>214</sup>

In this sense, the IS/MND and Noise Study's apparent conclusion that noise impacts, no matter how loud, cannot be significant if they are only experienced for a couple of months suffers from flawed logic and a misunderstanding regarding how significance thresholds operate for purposes of CEQA.

The absurdity of this rationale is highlighted when compared to the construction noise regulation framework utilized by the City of Oakland. It establishes different maximum allowable construction noise levels depending on whether the construction is for more or less than 10 days. <sup>215</sup> Construction lasting for a period falling under the threshold is short-term and construction lasting for longer than 10 days is long-term. <sup>216</sup> Mr. Watry highlights that asking residents impacted by construction noise to tolerate it for 10 days is a more reasonable expectation than requesting that they tolerate it for up to two months. <sup>217</sup>

CEQA case law further supports the view that the IS/MND's interpretation of the City's significance thresholds is unreasonable. In *Keep our Mountains Quiet v. County of Santa Clara*, neighbors of a wedding venue sued over the County of Santa Clara's failure to prepare an EIR for a proposed project to allow use permits for weddings and other party events at a residential property abutting an open space preserve. Neighbors and their noise expert contended that previous events at the facility had caused significant noise impacts that reverberated in neighbors' homes and disrupted the use and enjoyment of their property. The County's MND relied on the noise standards set forth in its local noise ordinance as its thresholds to evaluate significant noise exposure from the project, deeming any increase to be insignificant so long as the absolute noise level did not exceed those standards. 220

<sup>&</sup>lt;sup>220</sup> Id. at 732.



<sup>&</sup>lt;sup>214</sup> Watry Comments, p. 4.

<sup>&</sup>lt;sup>215</sup> Oakland Planning Code section 17.120.050 (Noise), Subsection G (Temporary Construction of Demolition).

<sup>&</sup>lt;sup>216</sup> *Id*.

<sup>&</sup>lt;sup>217</sup> Watry Comments, p. 4.

<sup>&</sup>lt;sup>218</sup> Keep Our Mountains Quiet v. County of Santa Clara (2015) 236 Cal. App. 4th 714, 719.

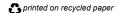
<sup>&</sup>lt;sup>219</sup> *Id.* at 724.

But the Court of Appeal held that "an EIR is required if substantial evidence supports a fair argument that the Project may have significant unmitigated noise impacts, even if other evidence shows the Project will not generate noise in excess of the County's noise ordinance and general plan."<sup>221</sup> The Court determined that the County erred in only considering the absolute noise level without evaluating the effect of the increase in noise from the ambient level.<sup>222</sup> Even though the County's sound consultant concluded that live band noise would likely comply with County noise standards, the Court decided that the 10 dB increase of a live band above DJ music combined with neighbor testimony of hearing pounding DJ music supported a fair argument that the project may have a significant environmental impact.<sup>223</sup> The Court reached this conclusion despite the fact that the use permit allowed only one live band event in the first year with more in future years only if the noise from the event complied with the noise ordinance because "compliance with the ordinance does not foreclose the possibility of significant noise impacts."<sup>224</sup>

As explained in *Keep Our Mountains Quiet*, compliance with a given noise threshold is not a guarantee the impacts are insignificant and substantial evidence can still be presented to support a fair argument of significance that will require preparation of an EIR.<sup>225</sup> Here, the noise calculations presented in the Noise Study show exceedance of the significance threshold, just not for over a year.<sup>226</sup> Just as the County in *Keep Our Mountains Quiet* was required to consider evidence of significant noise impacts despite its conclusion that the noise level would not violate the ordinance's threshold, the City must contend with Mr. Watry's analysis of the City's evidence that noise impacts will be significant even though it considers two months of loud noise insignificant.<sup>227</sup>

<sup>&</sup>lt;sup>227</sup> See *Keep Our Mountains Quiet*, 236 Cal.App.4th at 732 ("[A]n EIR is required if substantial evidence supports a fair argument that the Project may have significant unmitigated noise impacts, even if other evidence shows the Project will not generate noise in excess of the County's noise ordinance and general plan.").





 $<sup>^{221}</sup>$  *Id*.

<sup>&</sup>lt;sup>222</sup> Id. at 733 (citing CEQA Guidelines, Appendix G, § XII(d) and Berkeley Keep Jets Over the Bay Committee v. Board of Port Com'rs, 91 Cal.App.4th 1344, 1382 [concluding that the "potential noise impact of increased nighttime flights mandate[d] further study"]).

<sup>&</sup>lt;sup>223</sup> Id. at 733.

 $<sup>^{224}</sup>$  *Id*.

<sup>&</sup>lt;sup>225</sup> Id. at 732.

<sup>&</sup>lt;sup>226</sup> Noise Study, pp. 2, 11, 18.

Moreover, as the Court in *Keep Our Mountains Quiet* indicated, the City is required to evaluate the *increase* in noise level from ambient levels, not just the absolute noise level associated with the Project. The IS/MND and Noise Study indicate that construction of the underground transmission line along Monterey Road will "cause noise levels that substantially exceed the existing ambient and local standards and result in difficult outdoor speech for a period up to two months." This is similar to the evidence in *Keep Our Mountains Quiet* that live music would be 10 dB louder than (or about twice as loud as) already disruptive DJ events. Although the lead agency's noise consultant deemed the live music "likely" to comply with County noise standards and despite the fact that live music could only be used one time in the first year, the Court concluded there was a fair argument of significant impacts based on substantial evidence of disruptive noise increases. <sup>231</sup>

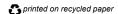
Mr. Watry's comments that the Project could produce noises three to eight times louder than the ambient with substantial interference on speech constitute substantial evidence supporting a fair argument that construction noise should be deemed a significant and unavoidable impact.<sup>232</sup> As a result, the City must prepare an EIR to disclose, analyze and mitigate these impacts.

### B. The Mitigation Measures Proposed in the IS/MND are Inadequate to Reduce Noise Below Significant Levels

In addition to reasoning that the temporary nature of the construction noise limits the significance of the impacts, the IS/MND insists that mitigation measures included as Standard Permit Conditions would reduce noise levels below significant levels.<sup>233</sup> However, as Mr. Watry explains, these conditions "would do little, if anything to actually reduce construction noise levels"<sup>234</sup> for several reasons.

<sup>&</sup>lt;sup>234</sup> Watry Comments, p. 3.





 $<sup>^{228}</sup>$  See id. at 733 ("We agree that the lead agency should consider both the increase in noise level and the absolute noise level associated with a project.").

<sup>&</sup>lt;sup>229</sup> Watry Comments, p. 4.

<sup>&</sup>lt;sup>230</sup> Keep Our Mountains Quiet, 236 Cal.App.4th at 733.

 $<sup>^{231}</sup>$  Id.

<sup>&</sup>lt;sup>232</sup> Watry Comments, p. 4.

<sup>&</sup>lt;sup>233</sup> IS/MND, pp. 111–112.

First, the proposed construction of a solid plywood fence to block noise "is not practical for construction along Monterey Road." Second, the conditions include the use of mufflers. But because the noise model uses reference data from projects built from the 1990s to 2007, mufflers are already accounted for in the modeling and any claim that mufflers would further mitigate construction noise impacts "would result from improper double counting of the noise reduction they provide." Third, prohibiting unnecessary idling, while a laudable practice, will not reduce calculated noise levels. Tourth, Locating stationary equipment as far as possible from sensitive receptors is infeasible or unlikely to be effective given the "linearity of the transmission line and the small space between that line and the residential property lines." Finally, the conditions include using "quiet compressors". However, compressors are not at all listed in the equipment used for the noise calculation, so using "quiet compressors" would increase the noise levels, if anything.

The IS/MND's reliance on infeasible and ineffective mitigation measures violates CEQA.<sup>240</sup> As with the EIR in *Kings County Farm Bureau*, the IS/MND here cannot rely on infeasible or ineffective mitigation measures such as building an impractical noise barrier, committing to reduce idling which will not address the root problem of construction noise, or trying to move equipment further away from residences when the equipment necessarily must remain by the roadway to complete the work.<sup>241</sup> The IS/MND violates CEQA when it double counts noise reductions from mufflers already included in modeling to reach the conclusion that noise impacts will be less than significant. It is also improper to attempt to mitigate noise impacts by claiming use of "quiet" compressors when such compressor equipment is not clearly needed for construction and is not even listed as part of the noise analysis. Therefore, an EIR must be prepared to evaluate the significant noise impacts and require feasible, enforceable, and effective mitigation measures.

<sup>&</sup>lt;sup>235</sup> Watry Comments, p. 3.

<sup>&</sup>lt;sup>236</sup> Watry Comments, p. 3.

<sup>&</sup>lt;sup>237</sup> Watry Comments, p. 3.

<sup>&</sup>lt;sup>238</sup> Watry Comments, p. 3.

<sup>&</sup>lt;sup>239</sup> Watry Comments, p. 3; Noise Study, p. 16.

<sup>&</sup>lt;sup>240</sup> See Pub. Res. Code §§ 21002, 21081(a), 21100(b)(3); 14 C.C.R. § 15126.4 (public agencies must adopt feasible and enforceable mitigation measures that will substantially lessen significant environmental impacts).

<sup>&</sup>lt;sup>241</sup> Kings County Farm Bureau, 221 Cal.App.3d at 727–728.

### IX. THE IS/MND'S NOISE STUDY RELIES ON AN UNDISCLOSED EIR FOR ITS OPERATIONAL NOISE ANALYSIS

The Noise Study references a June 2018 EIR for a "similar facility located in Los Angeles, California" as the basis for its heating, ventilation, and air conditioning (HVAC) noise analysis.<sup>242</sup> However, as Mr. Watry points out, the reference EIR "is not cited, nor is any basis provided that would allow for a comparison of the Los Angeles project to the Hummingbird Energy Storage Project (e.g., required tons of cooling, size of facility, etc.)."<sup>243</sup> The IS/MND and Noise Study further fail to provide any specifics about the size or type of HVAC equipment used in the EIR.<sup>244</sup> Mr. Watry explains that the lack of detail "makes it impossible to determine if the noise levels used for the HVAC analysis are reasonable."<sup>245</sup>

This lack of transparency regarding the basis for the HVAC analysis renders the IS/MND inadequate as an informational document under CEQA. It is well settled that a CEQA document may not rely on hidden studies or documents that are not provided to the public.<sup>246</sup> The City must amend its analysis to fully disclose the sources that form the basis for its conclusion.

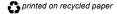
#### X. CONCLUSION

CEQA requires that an EIR be prepared if there is substantial evidence that any aspect of a project, either individually or cumulatively, may cause a significant effect on the environment.<sup>247</sup> As discussed herein, there is substantial evidence supporting a fair argument that the Project would result in significant adverse impacts that were not identified in the IS/MND, and that are not adequately analyzed or mitigated. The IS/MND also fails to contain the basic information and

<sup>&</sup>lt;sup>246</sup> Santiago County Water District v. County of Orange (1981) 118 Cal.App.3d 818, 831 ("Whatever is required to be considered in an EIR must be in that formal report; what any official might have known from other writings or oral presentations cannot supply what is lacking in the report.").

<sup>247</sup> Pub. Res. Code § 21151; 14 CCR §15063(b)(1).





<sup>&</sup>lt;sup>242</sup> Noise Study, p. 21.

<sup>&</sup>lt;sup>243</sup> Watry Comments, p. 5.

<sup>&</sup>lt;sup>244</sup> Watry Comments, p. 5.

<sup>&</sup>lt;sup>245</sup> Watry Comments, p. 5.

analysis required by CEQA, deficiencies which "cannot be dismissed as harmless or insignificant defects." <sup>248</sup>

We urge the City to fulfill its responsibilities under CEQA by withdrawing the IS/MND and preparing a legally adequate EIR to address the potentially significant impacts described in this comment letter. Only by complying with all applicable laws will the City and the public be able to ensure that the Project's environmental impacts are mitigated to less than significant levels and that the City complies with CEQA.

Thank you for your attention to these comments.

Sincerely,

William Mumby

Wil Muny

Attachments

WM:acp

<sup>&</sup>lt;sup>248</sup> Bakersfield Citizens for Local Control v. Bakersfield (2004) 124 Cal.App.4th 1184, 1220.