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California Energy Commission 1516 Ninth Street Sacramento, CA 95814-5512 Submitted by E-mail to: docket@energy.ca.gov Docket Number 13-CCEJA-1

RE: Docket Number 13-CCEJA-1 – Comments on Proposition 39: California Clean Energy Jobs Act 2013 Program Implementation Draft Guidelines - Failure to Incorporated Proposition 39 Mandate to Fund Repairs that Contribute to Related Health and Safety Conditions In Public School

On behalf of the undersigned individuals and organizations, we respectfully submit these comments on the Proposition 39: California Clean Energy Jobs Act 2013 Program Implementation Draft Guidelines ("Draft Guidelines"). The Draft Guidelines define how the State of California intends to implement the California Clean Energy Jobs Act (Proposition 39) Program. We appreciate the hard work that staff has put into developing the Draft Guidelines. Unfortunately, the Draft Guidelines currently neglect to include Proposition 39's mandate that funds for energy efficiency retrofits for public schools also include funding for "related improvements and repairs that contribute to reduced operating costs and improved health and safety conditions."

Across the state, California schools have been forced to delay facilities maintenance and improvements due to years of budget shortfalls. As a result, most classrooms have insufficient ventilation and lighting, disruptive noise levels, and harmful levels of toxins and irritants.<sup>2</sup> These conditions have been directly correlated with high levels of illness and absenteeism and depressed test scores.<sup>3</sup>

The American Lung Association has found that American school children miss more than 14 million school days a year because of asthma worsened by poor indoor air quality.<sup>4</sup> These student absences have long term effects for school district budgets as a whole. The effect of

<sup>&</sup>lt;sup>1</sup> Pub. Resources Code § 26205, subd. (a)(1); see also § 26206, subd. (c).

<sup>&</sup>lt;sup>2</sup> Gordon & Barba, Proposition 39 White Paper: Investing in California's Future at p. 9, http://thenextgeneration.org/files/Prop39 Investing In California.pdf.

<sup>&</sup>lt;sup>3</sup> Ibid, see also Global Green USA, Healthier, Wealthier, Wiser: A Report on National Green Schools, available at <a href="http://www.sb39advancecalifornia.org/wp-content/uploads/2013/research-downloads/Global-Green-Healthier-Wealthier-Wiser.pdf">http://www.sb39advancecalifornia.org/wp-content/uploads/2013/research-downloads/Global-Green-Healthier-Wealthier-Wiser.pdf</a>; California Department of Education, Sustainable Schools Improve Learning and the Environment, available at <a href="http://www.sb39advancecalifornia.org/wp-content/uploads/2013/research-downloads/CDE-Sustainable-Schools.pdf">http://www.sb39advancecalifornia.org/wp-content/uploads/2013/research-downloads/CDE-Sustainable-Schools.pdf</a>

<sup>&</sup>lt;sup>4</sup> I Global Green USA, Healthier, Wealthier, Wiser: A Report on National Green Schools, available at <a href="http://www.sb39advancecalifornia.org/wp-content/uploads/2013/research-downloads/Global-Green-Healthier-Wealthier-Wiser.pdf">http://www.sb39advancecalifornia.org/wp-content/uploads/2013/research-downloads/Global-Green-Healthier-Wealthier-Wiser.pdf</a>

these conditions on school performance is even more dramatic. One study found that improving a school's health and safety standards can lead to a 36 point increase in California Academic Performance Index scores. Even when controlled for socio-economic status, students in schools without sub-standard ventilation, lighting and noise levels perform 5 to 17 percentage points better. The economic benefit to the state from increased attendance and better educated graduates cannot be overstated.

Targeted retrofits can help solve this problem. In particular, improvements in heating, ventilation and cooling systems and lighting systems, which together account for more than two-thirds of all school-related energy expenditures, can directly improve student and teacher performance and health. However, these retrofits will only have this ancillary benefit in performance and health if indoor environmental conditions are addressed as part of the retrofit.

Energy efficiency upgrades to heating and cooling systems will not adequately address ventilation issues, and in some cases could exacerbate existing problems, unless indoor air quality is evaluated and addressed at the same time. Similarly, installing more efficient advanced lighting control systems in schools will provide no benefit to students and teachers unless inadequate lighting conditions are addressed at the same time. Energy efficiency upgrades must also be assessed to ensure that they improve, rather than degrade, noise issues in classrooms.

Proposition 39 recognizes this and thus expressly mandates that funding for energy efficiency upgrades in public schools also be used to fund related repairs and improvements that contribute to improved health and safety conditions. This mandate is consistent with guidance from the United States Environmental Protection Agency that indoor air quality and other aspects of school building performance that are critical to healthy and effective learning should be addressed when planning and designing programs to improve energy efficiency in existing K-12 school buildings.<sup>8</sup>

We strongly urge the Commission to revise the Draft Guidelines in order to address Proposition 39's mandate to fund related health and safety improvements in public schools *in addition to* energy efficiency improvements.

The Draft Guidelines must also be revised to more accurately reflect the benefit of improving the indoor environmental quality of classrooms. The Draft Guidelines currently assign an arbitrary 3% additional economic benefit for non-energy related benefits such as improvements in health and safety. This arbitrary percentage both overstates the benefits of energy efficiency measures that do not address poor indoor environmental conditions and understates the benefits of measures that directly address these conditions. In addition, this percentage is much lower than

<sup>&</sup>lt;sup>5</sup> California Department of Education, Sustainable Schools Improve Learning and the Environment, available at <a href="http://www.sb39advancecalifornia.org/wp-content/uploads/2013/research-downloads/CDE-Sustainable-Schools.pdf">http://www.sb39advancecalifornia.org/wp-content/uploads/2013/research-downloads/CDE-Sustainable-Schools.pdf</a>.

<sup>6</sup> Gordon & Barba, Proposition 39 White Paper: Investing in California's Future at p. 11, <a href="http://thenextgeneration.org/files/Prop39\_Investing\_In\_California.pdf">http://thenextgeneration.org/files/Prop39\_Investing\_In\_California.pdf</a>.

<sup>7</sup> Ibid.

<sup>&</sup>lt;sup>8</sup> U.S. Environmental Protection Agency, Energy Efficiency Programs in K-12 Schools: A Guide to Developing and Implementing Greenhouse Gas Reduction Programs (2011), available at <a href="http://www.sb39advancecalifornia.org/wp-content/uploads/2013/research-downloads/EPA-Energy-Efficiency-Programs-in-K-12-Schools.pdf">http://www.sb39advancecalifornia.org/wp-content/uploads/2013/research-downloads/EPA-Energy-Efficiency-Programs-in-K-12-Schools.pdf</a>.

the 10% additional economic benefit number that was recommended by the California Department of Education in their May 14, 2013 Recommendations for Proposition 39 K-12 Project Guidance.<sup>9</sup>

We strongly recommend that either a qualitative approach be applied to assessing health and safety benefits or that an economic approach be developed that takes into account the economic benefits both to the school and the state economy from increased attendance rates, improved health and substantially improved academic performance.

Thank you for your consideration of our comments.

Sincerely, Denir K Smann

Denise K.. Asmann

<sup>&</sup>lt;sup>9</sup> California Department of Education, California Energy Commission and the California Public Utilities Commission, *Proposition 39: Clean Energy Jobs Act of 2012 Energy Efficiency K-12 Project Guidance* (May 14, 2013) at p. 25.