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NV5 - AB 841 Questions & Comments - School Energy Efficiency Stimulus Program

Additional submitted attachment is included below.

February 5, 2021

California Energy Commission 1516 Ninth Street Sacramento, CA 95814

Dear CEC Commissioners and Staff:

Thank you for giving NV5 the opportunity to provide feedback regarding the draft guidelines for implementing AB 841 – the School Energy Efficiency Stimulus (SEES) program; specifically, both the School Reopening Ventilation and Energy Efficiency Verification and Repair (SRVEVR) Program, and the School Noncompliance Plumbing Fixture and Appliance (SNPFA) Program. NV5 has significant experience providing engineering services, including energy and sustainability consulting for primary, secondary, and post-secondary school facilities across California.

NV5 has compiled the following questions and suggestions after reviewing the legislation, draft guidelines, and attending the workshops.

- 1. We strongly suggest that the CEC allow some percentage of the grant funding to be available for LEA's to enlist third party support in initial engineering project scope, design, grant application, and project implementation. As most LEA's do not have in-house engineering expertise to perform engineering assessments and holistic recommendations for each site. Grant funding allocated to a comprehensive initial engineering audit will mitigate the risk of program waste associated with funding ineffective or unnecessary maintenance, repairs, or replacements. The former Prop 39 funding allowed 30% of the grant funding to be used for this purpose. It is crucial for a successful outcome to fund an initial "no cost for services" audit assessment which will significantly support smaller and underserved LEA's who otherwise could be paying for services they do not need or do not meet the requirements of the application.
- 2. It should be considered that the 20% funding allocation for retrofits and efficiency upgrades be performed initially, combined with guaranteed maintenance contracts to maintain the reliability and efficiency. There may be instances in which funding is spent servicing equipment past it's effective useful life, only for the unit to fail a short time later due to increased runtime and system load and require additional funding to replace – which may or may not be available.
- 3. Funding to replace the existing single-speed HVAC unit motors with new variable speed motors (VSDs) should be considered as part of the 80% funding amount for repairs and tune up maintenance. Adding VSD's onto the units will increase energy efficiency, and prolong the life of the units by allowing the units to run at reduced speed, and allow for more controlled demand control ventilation based on the CO2 levels in the classrooms.
- 4. Will grant funding be applicable for ongoing monitoring-based commissioning? For instance, regarding the continued Carbon Dioxide monitoring and ventilation control requirements, and any system retrocommissioning which may be required.
- 5. How will the baseline energy usage and greenhouse gas emissions be determined to attribute any potential energy savings for utility claims? How will cost-effectiveness be determined? Based upon our

understanding of the draft guidelines, if the baseline is set to the repaired condition then it is very likely little to no savings will result from the changes unless more efficient equipment is installed.

- 6. Will these projects be claimed by each IOU via the CPUC's reporting portal CEDARs? If so, how will they obtain all the necessary reporting data for the claims - e.g., costs, quantities, measures, etc. for each site? This may prove complicated and difficult for the utilities as the claims process is complicated and may require inputs and data validation which may not be provided. Typically, the programs are reported as a "resource" or "non-resource" program – that is a "resource" program intends to claim savings for specific measures, while "non-resource" do not claim savings. Although, "non-resource" programs can report individual project savings and spend if the applicable measures are configured. Additionally, if energy & GHG savings are to be reported, the measures will need to be pre-determined and configured in each IOU's internal system using all valid parameters per the CEDARs portal prior to the claims.
- 7. Based on our experience, schools should expect an increase in equipment runtime and operation for safe reopening. Will additional resources be provided to support LEA's in reducing their increased utility bills? This may significantly impact underserved school districts struggling with high utility bills currently.
- We recommend that grant funds be applied more generally per LEA instead of per specific site. Since initial cost estimates can vary significantly due to scope changes, reopening plans, etc., it would allow the LEA more flexibility in performing the work needed, when they needed it.
- 9. We recommend allowing funding for hot water heater replacements and retro-commissioning as part of the SNPFA program. This would benefit all aspects of the water usage at LEA sites, as well as provide more reliability and efficiency.
- 10. It is recommended to incentivize LEA's to replace existing natural gas space or water heating systems with heat pump technology. This would support the LEA's efforts to meet California's greenhouse gas and NOx reduction goals, while also increasing reliability and school safety from removing natural gas usage.

Thank you again for the opportunity to provide our input for your consideration on the above.

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