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NEMA Water Energy Efficiency Comments

On behalf of NEMA Vice President of Government Affairs, the attached comments are respectfully submitted.

Additional submitted attachment is included below.

National Electrical Manufacturers Association

PHILIP A. SQUAIR
Vice President, Government Relations

November 26, 2019

Online via:
https://efiling.energy.ca.gov/Ecomment/Ecomment.aspx?docketnumber=19-ERDD-01

Commissioner Andrew McAllister
Mr. Kevin Mori
California Energy Commission
Docket Unit, MS-4
Docket No. 19-AAER-04
1516 Ninth Street
Sacramento, CA 95814-5512

NEMA Comments on CEC Notice of Staff Workshop - Energy Research Innovations in Water Treatment, Delivery, and Energy Recovery Workshop

Dear Commissioner McAllister and Mr. Mori:

As the leading trade association representing the manufacturers of electrical and medical imaging equipment, the National Electrical Manufacturers Association (NEMA) provides the attached comments in response to the CEC Request for Comments on the Energy Research Innovations in Water Treatment, Delivery, and Energy Recovery. These comments are submitted on behalf of NEMA Member companies.

NEMA represents more than 325 electrical equipment and medical imaging manufacturers that make safe, reliable, and efficient products and systems across 56 product sections. Our combined industries account for 370,000 American jobs in more than 6,100 facilities covering every state. Our industry produces $124 billion electrical equipment and medical imaging shipments per year with $42 billion exported.

As mentioned during our verbal comments given in the November 19th workshop, NEMA conducted a research project in 2015-2016 to examine the energy efficiency potential in Water and Wastewater utilities. Energy use is embedded in the supply, gathering, and treatment of clean and wastewater in U.S. infrastructure, and water is embedded in the generation and application of energy. Where the two converge is a crossing point that is poorly understood outside facilities management. This nexus represents significant strategic opportunities.

One outcome of the 2015-2016 effort was a resource website which helps educate water utility staff on the systems and components available to improve energy efficiency and plant management. This website, the *Water Energy Toolkit*, provides resources to educate water utility owners, managers, and employees about:

- Improvements and upgrades to water systems
- Paying for energy-saving programs
- Pump, motor, metering, and control systems training

The site may be accessed here: http://waterenergy.info/

Several documents and reports were developed by the research project, providing numerous feasible energy-savings solutions. A full list of available NEMA research documents and related materials may be found on our website here: https://www.nema.org/search/pages/default.aspx?k=water%20energy#k=EWS

Among other things, this list includes a glossary of terms, highlighting the difference in terminology between typical energy efficiency discussions and water utility discussions. While the terms used are often identical, their meanings can be notably different. Our glossary helps clarify terms and their uses and reduces potential misunderstandings in conversations between the two sectors (energy versus water).

Our ultimate finding was that potential for energy efficiency and energy savings in water utilities is *high.* For instance, we found that utilities can save as much as 30% of their pumping costs immediately with readily-available components and control systems. Unfortunately, as we heard in the November 19th workshop, plant managers are often prevented or discouraged from pursuing plant improvements for a host of reasons, most often relating to ownership models and associated decision-making processes.

If inertia and resistance to energy efficiency improvements at individual utilities cannot be overcome, the innovative future water-energy solutions discussed at the November 19th workshop cannot be effectively realized except in random cases. However, if the CEC were to also focus on how to solve adoption challenges at water utilities today, leveraging NEMA Urban Water Systems solutions and savings proposals which effectively guarantee savings, this path to efficiency and savings incentives can then be used when the future solutions the workshop and related efforts in proceeding 19-ERDD-01 are ready.

We welcome your careful consideration of this information and we look forward to the Commission regularly seeking constructive interaction with industry. If you have any questions on these comments, please contact Alex Boesenberg of NEMA at 703-841-3268 or alex.boesenberg@nema.org.

Sincerely,

Philip Squair
Vice President, Government Relations
National Electrical Manufacturers Association