



November 13, 2015

Mary Nichols  
Chair  
California Air Resources Board  
1001 "I" Street  
Sacramento, CA 95814

**RE: Aclara Technologies Comments regarding the Cap-and-Trade Auction Proceeds Draft Second Investment Plan: Fiscal Years 2016-17 through 2018-19**

Dear Chairwoman Nichols:

Aclara Technologies LLC, the leading provider of smart water infrastructure technologies, with offerings in advanced metering, device networking and communications, data management, analytics and customer service, appreciates the opportunity to provide these comments regarding the Cap-and-Trade Auction Proceeds Draft Second Investment Plan: Fiscal Years 2016-17 through 2018-19 ("Plan"). We believe it is critical that the Plan, through support of agencies like the Department of Water Resources and the Energy Commission, provide flexibility for investments in technologies such as advanced metering and analytics that advance both water/energy efficiency and reduce greenhouse gas emissions.

As acknowledged in the Plan, the conveyance of water represents one of the largest single uses of energy in the state. According to Navigant, water infrastructure consumes 7.7% of the state's electricity, the largest amounts for pumping and conveyance. For this reason, Aclara supports the Plan's recommendation to target "investments to power water systems with more renewable energy sources, improve energy efficiencies, and strategically reduce demand for carbon-intensive water."

In workshops earlier this year, the Energy Commission proposed a limited technology focus in its implementation of the Water Energy Technology (WET) program, indicating it would focus on on-site technologies and not consider the energy embedded in water when evaluating proposals for funding. Aclara recommends that a broader array of smart water technologies and infrastructure investments, specifically advanced metering

infrastructure, data analytics and behavioral approaches, be eligible for funding under the Plan.

Over the last year, California has continued to exercise leadership in recognizing the link between water and energy savings. In Decision 15-09-023 adopted in September, 2015, the Public Utilities Commission approved utility use of a water-energy calculator to allow better estimation of energy savings made possible by water conservation. The calculator represents an important step forward, as it opens the door to expanded water supplier collaboration with energy utilities. Based on demonstrations of the supplier's energy use, it enables us to better calculate greenhouse gas reductions resulting from steps like leak mitigation and improved water conservation.

Aclara urges the Board to consider the direct greenhouse gas reductions enabled by advanced metering technologies compared to older technologies such as automated "drive-by" meter reading that requires truck rolls to collect data – which for large water suppliers may mean tens or hundreds of thousands of truck miles per year. The implementation of advanced metering takes vehicles off the road that are currently used in manual or mobile meter reading; eliminates truck rolls currently required to gather opening and closing meter reads and reduces the need to get utility personnel to customer sites to detect potential customer-side leaks and for other purposes. Other environmental co-benefits include reduced criteria air pollutants and traffic congestion. One utility customer has used Aclara AMI system to reduce driving by more than 4 million miles per year.

More fundamentally, advanced metering and analytics, including solutions aimed at changing consumer behavior, will transform water management and enable significant savings. According to the Pacific Institute, metering reduces water use by 15-20%. At the operational level, advanced analytics can detect leaks in both the distribution system and customer homes and businesses, eliminating the need to expend energy to pump water into the system that is then lost to leaks.

Providing consumers with specific knowledge about their water use enables them to identify additional water-saving steps that very cost-effective. According to the California Water Foundation, data-driven customer engagement programs reduce water consumption between 4.6 and 6.6%. Finally, the availability of actual usage data made available by advanced metering enables policy makers to measure and evaluate actual savings from efficiency initiatives. In summary, data driven analytics are necessary to provide California the means to measure, evaluate and continuously improve water/energy efficiency initiatives going forward.

Notwithstanding the imposition of drought surcharges and rate adjustments, water agency revenues are under pressure because of declining water use. For many communities, particularly those serving disadvantaged communities, it may be difficult to muster the resources needed to modernize water infrastructure. Aclara therefore urges the Plan to make available to these communities additional resources for investments in advanced metering, analytics and behavioral approaches.

Aclara appreciates the opportunity to offer these comments and looks forward to working with the Board on these critical issues. Please do not hesitate to contact Aclara government affairs representatives Jim Hawley at 916.447.4099 or Kara Saul-Rinaldi 202.276.1773 for additional information.

Sincerely,

Kumi Premathilake  
Senior Vice President  
Aclara