June 16, 2016

Jeanine Townsend
Clerk to the Board
State Water Resources Control Board
1001 I Street
Sacramento, CA 95814

RE: **Aclara Comments regarding 2016 Drinking Water State Revolving Fund (DWSRF) Intended Use Plan**

Dear Ms. Townsend and Members of the Board,

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 Drinking Water State Revolving Fund (DWSRF) 2016 Intended Use Plan. Aclara supports the use of revolving loan funds, as directed in Governor Brown's Executive Order B-37-16, to support deployment of new water metering systems as part of the Intended Use Plan. In our discussions with staff, they have made it clear that this includes Advanced Metering Infrastructure (AMI) including analytics and customer engagement software.

California's water infrastructure is one of the state's largest energy users, consuming 19% of the state's electricity for treating, pumping, and conveyance and generating greenhouse gas emissions equal to the emissions from more than 7 million cars. Governor Brown's Executive Order directs agencies to transition from the emergency footing to permanent, long-term improvements in water use management to strengthen California's resilience to drought and climate change. Aclara, which works with urban water suppliers across the state, supports the transition to long-term drought and climate resiliency.

The Draft Intended Use Plan, as an enumerated long-term goal, proposes to expand "the eligibility of projects to include water meters. Water meters not only encourage the conservation of water, thereby producing savings related to costs of production, treatment, storage and pumping, but also allow systems to establish effective water rate structures as well as identify potential distribution system water loss."[1]

[1] Intended Use Plan, p. 7

As the Board finalizes the Draft Intended Use Plan Aclara urges you to explicitly include AMI as eligible for funding and consider the overwhelming advantages of AMI over older Automated Meter Reading (AMR) systems that require on-site visits and/or truck rolls. As they rely on truck rolls to collect data, these older systems are far more carbon-intensive. They also yield much more limited datasets (typically a monthly or bi-monthly read) that are much less powerful for saving water and energy.

The granular – typically hourly or 15-minute data -- and much more timely usage information provided by AMI enables the use of powerful analytics that can more rapidly and precisely identify and reduce distribution-side and customer-side leaks, educate consumers about how to save water, enable improved system pressure management, identify theft and reduce other losses of non-revenue water.

Specifically, the implementation of water AMI enables California to make significant progress on many key areas:

- Reduce water loss due to leaks. AMI provides a continuous flow of water usage information, typically in hour or 15 minute intervals, which enables the use of analytics to quickly spot anomalies, identify leaks and notify users about water use restriction violations and undetected or excessive water use.

- Enable water agencies to provide consumers with specific, timely knowledge about their water use. Granular usage information, when presented in user-friendly, compelling formats, enables identification of leaks and additional water and energy savings that are cost-effective. According to a study by the California Water Foundation, customer engagement software has been shown to reduce water use by approximately 5 percent and significantly increase participation in water agency/utility conservation programs.

- Reduce greenhouse gas emissions related to the collection of water usage data. Currently, the vast majority of California's water meters are read manually or through drive-by systems, requiring vehicles and personnel who are dedicated to that function. AMI technologies collect and disseminate water usage data through secure systems that eliminate vehicle trips for water usage data collection as well as for other functions such as account activation.

- Enable improved water pressure management of utility systems, which consists of automatically modulating flow and pressure according to water demand and keeping pressure constant at the service points. Besides reducing leakage and bursts, smart pressure management lowers operating costs by reducing site visits and energy costs from maintaining unnecessary high pressure.

- Continue gains in water-energy efficiency. Data driven analytics are critical to provide policy makers, utilities and consumers with the means to evaluate, measure, verify and continuously improve water-energy efficiency initiatives going forward.

Aclara urges the Board, as the markets have, to recognize AMI as a best practice, with a presumption that any metering system financed by the DWSRF should enable at least these levels of benefits and GHG reductions.

The proposed Intended Use Plan categorizes projects and places metering projects into a "Category D"[2] to establish metering for "Non-metered service connections, or defective water meters." Aclara urges that this sentence be amended to read "Non-metered service connections, or defective or obsolete water meters" so that urban water systems desiring to upgrade their systems have clear latitude to realize the benefits of advanced metering without having to wait for equipment failure.

Aclara appreciates the Department's consideration of these issues and urges adoption of the Plan with these proposed changes.

Best regards,

/s/ Josh Chaise

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[2] Intended Use Plan, p. 13.