

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA

Petition of The Division of Ratepayer  
Advocates to Adopt, Amend, or Repeal  
a Regulation Pursuant to Pub. Util  
Code § 1708.5

Petition P.13-05-008  
(Filed May 22, 2013)

**PETITION OF THE DIVISION OF RATEPAYER ADVOCATES  
TO ADOPT, AMEND, OR REPEAL A REGULATION PURSUANT TO  
PUB. UTIL. CODE § 1708.5 TO DEVELOP A PARTNERSHIP FRAMEWORK  
BETWEEN ENERGY INVESTOR OWNED UTILITIES AND THE WATER  
SECTOR TO CO-FUND WATER-ENERGY NEXUS PROGRAMS**

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## UCAN RESPONSE TO DRA PETITION P.13-05-008

The Utility Consumers' Action Network is pleased to support the Petition (P.13-05-008) submitted by the Division of Ratepayer Advocates (DRA) to commence a new rulemaking proceeding and investigation that would ultimately “Develop a Partnership Framework between the Energy Investor Owned Utilities and the Water Sector to Co-Fund Water-Energy Nexus Programs.” (Petition, page 30) The “water sector” as DRA defines the sector includes both privately-owned, Commission-regulated water utilities and public water and wastewater agencies. The “water-energy nexus” refers to the inter-dependent relationship between water and energy resources. Essentially, DRA asserts and UCAN concurs, that “water and energy are inextricably linked.” (Petition, page 1)

Water is a scarce resource in its own right where conservation efforts are needed. DRA explains the importance of the nexus this way: “because water-related energy use accounts for nearly 20 percent of the state’s total energy requirements, substantial energy savings are attainable in the water sector.” As the Commission explained in D.07-12-050, “[n]ot only does it take a great deal of energy to use water, it takes a tremendous amount of water to produce and deliver energy services. It is like a mirror within a mirror: to use less water means using less energy, which in turn further reduces the demand for water.”

Given this interdependence of water and energy and the potential for both water and energy savings through co-funded “water-energy nexus programs,” there are multiple issues to be resolved. For example, if water-energy nexus program funds are going to be allocated to energy utilities and the water sector to participate in various water-energy nexus programs, then those funds need to be allocated efficiently and UCAN agrees with DRA that these program funds should be allocated according to the economic principle of “benefits received” by program participants.

To determine the benefits received by each sector and more specifically, by each participant, we need methodologies that can be applied consistently Statewide, e.g.:

- How to calculate energy savings embedded in water;
- How to calculate potential energy savings from the program;
- How to calculate potential water savings from the program  
(*not specifically included by DRA but part of any water system benefit*) ;
- How to calculate cost effectiveness in a water-energy nexus program;
- How to translate energy and water savings into “water system benefit”;
- How to translate energy and water savings into “energy system benefit”  
(*not specifically addressed by DRA but need to ensure that no new energy utility methodology will be required for water-energy nexus programs*);
- How to convert the benefits into an efficient program fund allocator;

According to the DRA petition at page 4, “At present, however, there are no adopted statewide methods or metrics for how the energy savings embedded in water use should be measured and the lack of such a methodology prevents program costs from being proportionally allocated between partnering entities.” Later, DRA adds: “Unfortunately, ...the lack of such a methodology is a major barrier to the broader adoption and deployment of water-energy nexus programs.” (Petition, Page 7)

UCAN agrees with DRA’s proposal that the following items should be examined:

- Barriers to Joint Funding of Water-Energy Nexus Programs for Different Categories of Partners;
- Ratemaking Treatment or Other Funding Mechanisms Available to Regulated Water Utilities Participating in Water-Energy Nexus Program Partnerships;
- Availability of Additional State and/or Federal Funding
- Coordination of Proposed Rulemaking with Current and Future Energy Efficiency Rulemaking Proceedings

Eliminating barriers to joint funding given the range of partners and seeking other sources of state and federal funding ensures that the potential for cost effective programs is not limited by arbitrary obstacles or resource limitations making substantial energy savings just beyond our grasp. Finally, ensuring that these water-energy nexus programs fit within the scope of all current and future energy efficiency rulemaking proceedings is

important especially since “California has designated conservation and energy efficiency as first in the “loading order” of preferred resources for meeting the State’s demand for electricity (before demand response and renewable energy). (Petition, page 1)

DRA notes that “The cost effectiveness of water-energy nexus programs for energy ratepayers could be increased by fairly allocating and sharing costs between energy and water ratepayers instead of limiting funding to one sector.” (Petition, page 3) UCAN agrees.

Consider an energy utility program that affects the water sector but the water sector is not participating, water sector benefits are not calculated or even considered. Assume the program is barely cost effective if funded by and evaluated for the energy sector alone. The program is deployed and the potential benefits achieved. However, assume benefits would accrue to the water sector. Had total benefits to both the energy and water sectors exceeded total program costs, then the program would have been cost effective overall, program costs could have been allocated in proportion to the *benefits received* making the program cost effective in both sectors. Limiting the energy efficiency program to one sector when there is a water-energy nexus or interdependence results in reduced net benefits, i.e., from co-sponsored and co-funded water-energy nexus partners. As the example illustrates, it is important to get the methodologies right. If the landscape is defined too narrowly, potential net benefits may be lost. The water-energy nexus is a rich landscape with huge potential for energy and water savings in the future. UCAN supports this DRA petition for an OIR and OII to establish that cost effectiveness calculations would not only be increased, but would be made more accurate with the development and co-funding of water-energy nexus programs tailored to both the electric utilities and water sector, i.e., regulated water utilities as well as public water and wastewater agencies.

UCAN believes that the critical elements are knowing how to measure: (1) the energy savings embedded in water, (2) the energy (and in some cases water) savings caused by the program, (3) the cost effectiveness of programs that bridge the different water and energy sectors, (4) comparable measures of “benefits” in the two sectors, and then (5) allocating funds to the individual sectors and participants based on the benefits received. Once all these methodologies have been determined, we need to identify barriers to joint funding of these water-energy nexus programs, plus whether any other State or federal funding is available. Ratemaking treatment and other funding mechanisms must be developed and the proposed rulemaking must be coordinated with current and future energy efficiency rulemaking proceedings. These issues were well described by DRA in its petition.

UCAN supports a rulemaking proceeding and investigation into developing a water/energy partnership framework. There is much work to be done to produce economically-sound methodologies that satisfy both the energy utility and water sectors. But while each sector may have different practices and standards, they clearly have a common interest in conservation and energy efficiency that they can build upon. UCAN is looking forward to working with both the energy and water sector in this case.

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