Conceptual Synopsis of DRA Proposed Rulemaking

To Develop a Partnership Framework between the Energy Investor Owned Utilities and the Water Sector to Co-Fund Water-Energy Nexus Programs.

Water and energy are inextricably linked. 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). Energy efficiency is also critical to meeting the greenhouse gas (GHG) emissions reduction goals required by the Global Warming Solutions Act of 2006 (Assembly Bill 32 or AB 32). 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. Similarly, conservation and efficient use of water are essential to meeting the future demand for water in California and the state's water savings goals. The Water Conservation Act of 2009 (Senate Bill X7-7 or SB X7-7) requires a 20 percent reduction in per capita urban water use by the year 2020. Water-energy energy efficiency (EE) programs, or water-energy nexus programs, save water and energy, yet the existing policy structure only focuses on benefits to the energy sector and presents barriers to implementation of these worthwhile programs. To expeditiously implement water-energy nexus programs, the Division of Ratepayer Advocates (DRA) recommends the Commission investigate approaches that: (1) provide for joint funding of water-energy nexus programs by the benefiting entities; and, (2) consider cost effectiveness from a broader perspective by recognizing water, energy and GHG benefits.

To this end, DRA filed a Petition on May 22, 2013 requesting that the Commission commence a rulemaking proceeding to develop a partnership framework between investor owned energy utilities (IOUs) and the water sector – both privately owned water utilities regulated by the Commission and public water and wastewater agencies – to co-fund programs that reduce energy consumption by the water sector in supplying, conveying, treating, and distributing water, and by agricultural and industrial water customers. This rulemaking should overall investigate new policies regarding joint funding of water-energy nexus programs by the energy IOUs and the water sector, and other local, state, and federal agencies to which the benefits of such programs may accrue.

This rulemaking should also seek to develop statewide methods or metrics for calculating energy embedded in water use as such a methodology is needed in order to allocate costs in proportion to the benefits realized by energy IOUs and their partners in the water sector from water-energy nexus programs. In developing this methodology, the Commission should consider whether the computation of energy savings along all segments of the water use cycle, potentially transecting the service territories of multiple energy IOUs and water agencies, is necessary

DRA supports further investigation of the potential for Dual-Funded Water-Energy Nexus Partnership Programs as outlined in Mikhail Haramati's 2008 white paper titled "Better than the Sum of their Parts: Taking Advantage of the Water-Energy Nexus to Create Dual-Funded Partnership Programs."[1] This paper addresses a fundamental public policy dilemma: how to fund programs where the benefits accrue to more than one agency, but are not cost-effective from any one agency's perspective. In her white paper, Haramati recommends a practical solution – the creation of "partnerships in which the costs can be allocated in the same proportion as the benefits

[1] *Better than the Sum of their Parts: Taking Advantage of the Water-Energy Nexus to Create Dual-Funded Partnership Programs*, Mikhail Haramati, for 2008 ACEEE Summer Study on Energy Efficiency in Buildings.

are received." DRA's petition will request that th**e Commission develop innovative policies regarding the critical, threshold issue of joint funding of water-energy nexus programs.**

One of the most significant barriers to the expansion of water-energy programs is the legal restrictions on the use of public funds that "hinder investments in cross-cutting programs,"[2] such as limitations on ratepayer funded energy efficiency programs. In order to increase the cost-effectiveness of water-energy nexus programs, and accordingly, facilitate increased implementation of such programs, DRA recommends the new rulemaking investigate not only the viability of joint funding of water-energy nexus programs, but also additional sources of state and federal funding.

In Decision (D).12-05-015, the Commission directed Staff "to develop a robust record in the 2013 application proceedings or in [Rulemaking (R).09-11-014] or a subsequent energy efficiency rulemaking to address strategies to overcome barriers to adoption and deployment of water-energy programs . . . [including] appropriate methods for calculating energy savings and cost-effectiveness in the water-energy context, [and] *issues associated with the joint funding and implementation of water-energy programs by the IOUs and water entities* . . . ."[3] Neither the proposals for water-energy nexus programs contained in the original applications filed by the energy IOUs for the 2013-2014 period, nor the supplemental information furnished by the energy IOUs in response to a request by the assigned Commissioner and Administrative Law Judge,[4] comprehensively address strategies to overcome barriers to adoption and deployment, like the pressing need for joint funding of these programs, and a statewide methodology for computing the energy embedded in water which, as noted, is necessary to allocate water-energy nexus program costs amongst partnering entities in proportion to benefits realized. Thus, pursuant to the Commission's directive in D.12-05-015, Staff is still required to develop a robust record regarding this issue in R.09-11-014, or in a subsequent energy efficiency rulemaking. **DRA recommends that it would be most productive for all interested parties to address this threshold issue in a separate proceeding.**

Therefore, DRA recommends that the Commission issue an Order Instituting Investigation/Order Instituting Rulemaking to "Develop a Partnership Framework between the Energy Investor Owned Utilities and the Water Sector to Co-Fund Water-Energy Nexus Programs." DRA proposes that this rulemaking encompass the following major issues:

1. the appropriate methodology for determining the energy embedded in water;
2. the appropriate **methodology for determining water system benefits** to water sector partners, and other local, state, and federal entities to which such benefits may accrue;
3. the appropriate **methodology for allocating program costs among partners,** *e.g.*, Program Administrator Cost (PAC) model;

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[2] *California's Water-Energy Nexus: Pathways to Implementation*, A White Paper by GEI Consultants, September 12, 2012, at p. 9, *available at* http://www.geiconsultants.com/stuff/contentmgr/files/0/41a3b5d6d0c1d24e21a3a40c32c049c8/miscdocs/energy_nexus_white_paper_9_17_12_1.pdf

[3] D.12-05-015, *Decision Providing Guidance on 2013-2014 Energy Efficiency Portfolios and 2012 Marketing, Education, and Outreach*, dated May 10, 2012, at p. 289 (italics added).

[4] *Scoping Memo and Ruling of Assigned Commissioner and Administrative Law Ju*dge, A.12-07-001, A.12-07-002, A.12-07-003, A.12-07-004, filed August 27, 2012, at p. 8 (Attachment A to the Scoping Memo and Ruling contains Question 49, which pertains to the energy IOUs' water-energy nexus proposals).

4. **strategies for overcoming barriers to joint funding of water-energy nexus programs** for different categories of partners, including, but not limited to, energy IOUs, Commission regulated water utilities, public water and wastewater agencies, and local government regional networks;
5. the **appropriate ratemaking treatment** and/or other funding mechanisms available to Commission regulated water utilities participating in water-energy nexus program partnerships;
6. **availability of additional state and/or federal funding** to increase the feasibility and cost-effectiveness of water-energy nexus programs; and,
7. **coordination between the proposed rulemaking and current and future energy efficiency rulemaking proceedings** to ensure consistent treatment of water-energy nexus programs in the energy efficiency programs of the energy IOUs. If and when the issues enumerated above are resolved in the proposed rulemaking, then the resultant methodologies and other adopted elements of a partnership framework for co-funding water-energy nexus programs should be incorporated into the Commission's concurrent and future energy efficiency rulemaking proceedings and energy efficiency portfolios. Such coordination is essential to connect energy efficiency programs and estimated energy savings to the integrated energy procurement resource planning process.

Pursuant to Rule 6.3(d) of the Commission's Rules of Practice and Procedure, party responses to DRA's Petition are due within 30 days of the date that the petition was served, or June 21, 2013, and replies are due 10 days later, on July 1, 2013, unless the Commission sets different dates.

The Commission has assigned DRA's Petition proceeding number P1305008. Parties may access information regarding the Petition through the Commission's Docket Card.