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BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking into Policies to Promote a Partnership Framework between Energy Investor Owned Utilities and the Water Sector to Promote Water-Energy Nexus Programs.

Rulemaking 13-12-011
(Filed December 19, 2013)

**ASSIGNED COMMISSIONER'S PRELIMINARY SCOPING MEMORANDUM
AND RULING REQUESTING COMMENTS ON SCOPE AND SCHEDULE**

1. Background

1.1 The Ongoing Drought

California is undergoing an unprecedented drought, replete with grim implications for California's economy in general, and for energy supply, food supply and farm-related employment in particular. On January 17, 2014, Governor Brown declared a Drought State of Emergency,¹ in which the Governor observed that "the magnitude of the severe drought conditions presents threats beyond the control of the services, personnel, equipment and facilities of any single local government."

The Commission has wide reach in California through its jurisdiction over energy utilities and water utilities, and other investor-owned utilities. The drought implicates numerous arenas in which the Commission has exercised its

¹ <http://gov.ca.gov/news.php?id=18368> (visited March 21, 2014).

jurisdiction, including but not limited to water conservation, energy conservation, consumer education, low income assistance, and support for communications and broadband deployment as telecommunications and internet facilities and services are increasingly crucial to water management, use, and public safety.

I want to explore what immediate-term, mid-term, and long-term actions the Commission can take to address the water-energy nexus and promote conservation in light of both the current drought and future climate challenges. To this end, we must coordinate efforts amongst several Commission divisions; bring our best ideas to the table; break silos; and work together. The water-energy nexus provides an opportunity for just this sort of coordinated effort.

1.2 The Origin of this Rulemaking and Prior Commission Action Regarding the Water-Energy Nexus

In Rulemaking (R.) 13-12-011, the Commission granted the Petition for rulemaking of the Office of Ratepayer Advocates (formerly the Division of Ratepayer Advocates) requesting that the Commission open a rulemaking proceeding to develop a partnership framework between investor-owned energy utilities 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.

The Commission has previously addressed issues relating to the water-energy nexus. Most pertinent to this scoping memorandum, in Decision (D.) 12-05-015, the Commission directed staff to develop a comprehensive cost effectiveness framework for water-energy that would allow for the evaluation of

joint water-energy efficiency projects and programs. In response to the Commission's directive, Staff created a work plan to address water-energy nexus issues. Staff presented a proposed framework for cost effectiveness at a public workshop in March 2013. Staff also formed a Project Coordination Group for Water Energy Cost-Effectiveness (PCG) to engage water and energy industry stakeholders. The purpose of the PCG was to allow industry stakeholders to provide input and assistance to Commission staff in creating a framework to analyze demand-side programs that focus on saving both water and energy. The PCG was also tasked with helping to identify sources of information for avoided cost calculations for water savings and for embedded energy in water.

I intend to integrate into this proceeding Staff's work to-date and Staff's workplan going forward.² We will also analyze additional issues, as elaborated below.

2. Issues

An overarching policy objective across this and other proceedings is to promote water conservation and stewardship, and thereby also promote energy efficiency and conservation. Promoting conservation will involve both immediate-term and longer-term actions by the Commission, energy efficiency program administrators, jurisdictional water, energy, and other utilities, users and suppliers, and partnerships with state, local, and Tribal governments, businesses, and community based organizations.

In the same way that a complete picture of water conservation necessitates an analysis of embedded energy in water and embedded water in energy, we

² R.13-12-011 directs that "[Staff's] ongoing work will continue to be coordinated with this rulemaking and in the successor energy efficiency proceeding, R.13-11-005."

will analyze the role of communications in the water-energy nexus. Analysis of use of sensor and communication facilities or the limits of such facilities is integral to understanding and addressing the water-energy nexus in rural and urban areas.

2.1 Expansion of Water-Energy Programs in 2015 is Within the Scope of Proceeding R.13-11-005, and Therefore outside the Scope of this Proceeding

In the immediate term we must do all we can to cost-effectively reduce water use and to mitigate the impact of the drought. We have already taken steps in this direction for water utilities (*see, e.g.,* Resolution W-4976), where we adopted drought procedures for water conservation rationing and service connection moratoria and authorizing memorandum accounts to track related monies. We will continue to press jurisdictional water utilities to take all reasonable and cost-effective conservation measures.

With respect to the water-energy nexus in particular, I would like to see energy efficiency program administrators expand their water-energy program efforts this year to the extent that they can do so in a “no regrets” way. I recognize that there is something of a “cart before the horse” problem with expanding water-energy programs now. It is difficult for energy efficiency program administrators to determine water-energy program effectiveness until we have developed a tool for determining the embedded energy in water. That said, energy efficiency program administrators should have sufficient data on hand from existing and prior programs to know whether, and to what extent, they can adjust 2014 program offerings in a clearly cost-effective, “no regrets,” way to save more water.

I appreciate that many pilots and other water-energy programs are underway, and as more data becomes available program changes may need to be

reevaluated. Accordingly, I expect energy efficiency program administrators to make changes to their 2014 program offerings to maximize water savings through cost-effective energy efficiency offerings. They are to do this either on their own or via advice letter, consistent with how they make other changes to their Commission-approved energy efficiency portfolios.³ If they need to obtain Commission Staff or Commission approval to shift funds, they should seek such approval. The Commission could also consider a resolution to approve certain categories of spending or shifts in energy efficiency portfolios to focus on water-energy efficiency efforts.⁴

2.2 Expansion of Water-Energy Programs in 2015 is Within the Scope of Proceeding R.13-11-005, and Therefore outside the Scope of this Proceeding

Energy efficiency program administrators filed their proposed 2015 energy efficiency portfolios on March 24, 2014, in R.13-11-005. All program administrators included some explicit discussion of how they might mitigate drought impacts, for which I commend them. Since the Commission will review energy efficiency program administrators' water-energy offerings in R.13-11-005, I do not intend to take up those programs here. Nevertheless, I certainly encourage the Commission to consider relevant evidence from, and issues explored in this proceeding, as may be submitted into the record for R.12-11-005, to expeditiously address the water-energy nexus in the 2015 energy efficiency programs.

³ The Commission approved energy utility energy efficiency portfolios in D.12-11-015.

⁴ See, e.g., Resolution L-411 (facilitating investments eligible for bonus depreciation pursuant to the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010).

2.3 Developing and Expanding Water-Energy Programs for 2016 and beyond is Within the Scope of this Proceeding

The rulemaking set out in some detail a preliminary scope for this proceeding. The general thrust of the preliminary scope was that we should develop a tool for determining how much energy is embedded in water, and whether water utilities or energy utilities and their ratepayers or a combination of both benefit from reduced water use, and how much they benefit. With a tool in place, the rulemaking contemplated that we would also address sources of program funding and provide general direction for energy efficiency program administrators and water utilities.

Consistent with the guidance in the rulemaking I have largely adopted the preliminary scope here. I have made some adjustments in response to comments parties made at the prehearing conference⁵ in this matter. I have also broadened the scope to reflect the fuller panoply of issues relating to water savings and the associated embedded energy.

Specific Issues within Scope are:

1. A water-energy cost effectiveness tool. This tool will include:
 - The appropriate methodology for determining the energy embedded in water, currently and prospectively, including contemplation of current and future resource scarcity, and avoided costs that result from water-energy programs; and
 - The appropriate methodology for determining water system benefits from water-energy programs, currently

⁵ The Commission held a prehearing conference in this matter on February 11, 2014.

and prospectively, including contemplation of current and future resource scarcity.

2. Actions to address the water-energy nexus in multiple contexts:
 - In water conveyance, delivery, and use for water storage, storm water capture, water recharge, water delivery, and other areas, including enabling demand response and time shifting;
 - In energy production, transmission, distribution, and use, including construction and design of facilities and demand response;
 - In agricultural pumping and irrigation;
 - In residential and commercial landscaping;
 - In current and potential water recycling efforts and programs; and
 - In maximizing local water sources.
3. *Inter-agency* coordination. We will:
 - Evaluate the role of CPUC coordination with the California Independent System Operator, the California Energy Commission, the California Department of Water Resources, other state, local, regional, and federal agencies, and tribal governments in promoting the water-energy nexus, and consider steps to promote collaboration with irrigation districts; and
 - Coordinate this rulemaking with related efforts by other agencies.
4. *Intra-agency* coordination. We will coordinate this rulemaking with current and future energy efficiency rulemaking proceedings, including the Energy Savings Assistance Program, to ensure consistent treatment of water-energy nexus programs within the energy efficiency portfolios of electric and gas corporations.
5. Water-Energy-Communications nexus. We will:
 - Examine the nexus of water, energy, and communications (*e.g.*, the use of information

management and data systems, high-speed internet access and apps, Supervisory Control and Data Acquisition (SCADA) systems for water management and treatment and the communications needs in SCADA systems, and steps to foster access to energy, communications technologies, and facilities that enable water management, storage, treatment, and use, including for wildfire and other public safety measures, in a manner that addresses the water-energy nexus); and

- Evaluate access to electric, gas, storage, renewable energy, and other power infrastructure as an enabling technology to address the water-energy nexus, including the link between power access and communications facilities; broadband internet access for water storage, treatment, conveyance, recharge, recycling, managers, utilities, and users; and consider steps to promote such access to address the water-energy nexus.

6. Funding and Cost Sharing. We will examine:

- The appropriate methodology for allocating water-energy program costs;
- Strategies for overcoming barriers to joint funding of water-energy nexus programs that include energy Investor Owned Utilities, Commission-regulated water and wastewater utilities, and different categories of partners, including, but not limited to, state agencies, federal agencies, regional water districts, public water and wastewater agencies, local government, regional agencies, and Tribes, the private sector, community-based organizations, foundations, non-profits, and others; and
- Availability of additional state, local, regional, Tribal, and/or federal funding, including grants and programmatic funds or matches, to increase the feasibility and cost-effectiveness of Investor Owned Utilities water-energy nexus programs and efforts.

7. Program evaluation. We will evaluate:

- Current Investor Owned Utilities water-energy programs, pilots, and related efforts to determine their efficacy, address potential barriers to implementation, and facilitate deployment of cost-effective measures to conserve water and energy; and
- Current and future leak detection programs to determine their efficacy, address potential barriers to adoption, and enable cost-effective leak detection efforts, timely communications with water users that have leaks, and steps to facilitate cost-effective measures to repair leaks.

8. Identify safety concerns raised by the issues identified above and propose steps to address those concerns, including reliability, water quality, and fire-fighting resources, and communications interconnection for public safety.

3. Schedule

Date	Event
April 24, 2014	10:00 a.m. PCG meeting and 1:00 p.m. workshop including discussion of Staff Proposal on avoided cost calculations for embedded energy – focus on determining marginal water supply.
July 1, 2014	9:00 a.m. – 12:00 p.m. PCG meeting/workshop including discussion of Staff Proposal on avoided water capacity costs. Workshop will be followed with a workshop report and an opportunity for party comments on the record.
October 14, 2014	9:00 a.m. PCG meeting/workshop regarding Staff Proposal on the cost effectiveness analysis for

	<p>water-energy – presentation of final Staff Proposal for a new Cost Effectiveness Framework</p> <p>Workshop will be followed with a workshop report and an opportunity for party comments on the record.</p>
August 13, 2014	<p>9:00 a.m. - 12:00 p.m. workshop on immediate drought actions and overcoming barriers to implementation. Workshop will be followed with a workshop report and an opportunity for party comments on the record.</p>
November 4, 2014	<p>10:00 a.m. workshop regarding cost allocation, alternative funding sources and program changes for jurisdictional water utilities.</p> <p>1:00 p.m. workshop regarding strategies for overcoming barriers to joint programs.</p>
December 8, 2014	<p>Office of Rate Payer Advocates prepares and serves workshop report on cost allocation;</p> <p>Class A water utilities to jointly prepare and serve workshop report regarding alternative funding sources and program changes for jurisdictional water utilities and energy utilities to jointly prepare and serve workshop report regarding strategies for overcoming barriers to joint programs.</p>
January 12, 2015	<p>Comments due on reports from November 4, 2014 workshops.</p>
TBD (possibly earlier than preceding workshops)	<p>Workshop on water-energy-communications-public safety nexus and Academic panel.</p>

	Workshop will be followed with a workshop report and an opportunity for party comments on the record.
March 2015	Target date for Proposed Decision.
May 2015	Target date for Commission vote.

This proceeding will conform to the statutory deadline for quasi-legislative matters set forth in Section 1701.5.⁶ Consistent with Rule 6.2, of the Commission’s Rules of Practice and Procedure (Rules), and the statutory case management deadline for quasi-legislative matters set forth in § 1701.5(b), we expect this proceeding to be concluded within 24 months of the issuance of the assigned Commissioner’s Scoping Memo and Ruling. In using the authority granted in § 1701.5(b) to set a timeframe longer than 18 months, we consider the complexity of the policy issues identified in this rulemaking and the number and multi-jurisdictional nature of the parties to this proceeding. The above schedule is adopted here and may be modified by the Administrative Law Judge as required to promote the efficient and fair resolution of the matter.

4. Categorization and Need for Hearing; Presiding Officer

The Commission preliminarily categorized this proceeding as ratesetting. However, as the preliminary scope shifted due to the drought declaration, this proceeding is now primarily focused on policy, programs and data collection. As such, this proceeding is more appropriately categorized as quasi-legislative. Pursuant to Rule 8.3 of the Commission’s Rules of Practice and Procedure: “[i]n any quasi-legislative proceeding, *ex parte* communications are allowed without restriction or reporting requirement.”

⁶ All statutory references are to the Public Utilities Code unless otherwise noted.

Issues will be resolved through comments and workshops without the need for evidentiary hearings.

Commissioner Sandoval is the assigned Commissioner, and will be the presiding officer.

5. Respondents

The Respondents to this rulemaking are Pacific Gas and Electric Company, Southern California Edison, San Diego Gas & Electric Company, Southern California Gas Company, each of the Class A Water utilities as well as incumbent Local Exchange Carriers (Pacific Bell Telephone Company d/b/a AT&T California, Verizon California, Citizens Telecommunications Company of California d/b/a Frontier Communications of California, and SureWest Telephone and the Rural Local Exchange Carriers that draw from the High Cost A Fund, and TDS Telecom, which serves several high-wildfire-danger areas), because communications play an integral role in the water-energy nexus. We also invite the participation of public water agencies. We may issue data requests and seek information from Investor Owned Utilities relevant to this water-energy nexus proceeding.

6. Intervenor Compensation for PCG Participation

Commission staff and some parties have been and are engaged in a collaborative effort (PCG) to develop a tool for determining the embedded energy in water and avoided water capacity costs associated with water conservation. PCG participants include some intervenors who in all likelihood will seek compensation through the Intervenor Compensation Program.⁷

⁷ Section 1801 *et seq.*

With the advent of this proceeding, public workshops will supplant PCG meetings. The PCG as such can be disbanded, with its work to continue within the “bigger tent” of this proceeding.

I do, however, want to recognize parties participating in this earlier collaborative effort. As part of that recognition, I want to offer some level of assurance that the Commission will not reject out-of-hand claims for intervenor compensation for work relating to this effort between the start of this rulemaking to now.

Section 1801 establishes a program of “compensation for reasonable advocate's fees, reasonable expert witness fees, and other reasonable costs to public utility customers of participation or intervention in any proceeding of the commission.” Section 1801.3 provides an additional gloss on the program. It provides for compensation in “formal proceedings of the commission involving electric, gas, water, and telephone utilities.”⁸ The purpose of the program is to formally “encourage the effective and efficient participation of all groups that have a stake in the public utility regulation process.”⁹

I find that the work of the PCG has been taking place as part of a “formal proceeding” of the Commission. Eligibility for compensation for that work has encouraged “the effective and efficient participation” of intervenors in this proceeding.

Any claims for intervenor compensation will, of course, be subject to the usual requirements applicable to intervenor compensation claims. Claims must include enough information for the Commission to make the findings required

⁸ Section 1801.3 (emphasis added).

by Sections 1801-1812.¹⁰ In particular, an intervenor seeking compensation for PCG participation must clearly describe its unique contribution(s) to developing a proposal that helps to achieve the overarching goals articulated in R.13-12-011. A claimant must also demonstrate reasonable collaboration with others to avoid duplication of effort. And, of course, claimed amounts must be reasonable.

7. Request for Party Comments

I recognize that the scope and schedule I have set out above differ materially from what was discussed at the prehearing conference in this matter. Rather than set a further prehearing conference, I invite parties to file comments on the scope of the rulemaking and the schedule set forth herein. Parties should limit comments to 10 pages, not including signature block(s). After receiving comments, I will decide whether to amend either the proceeding scope or schedule in response.

IT IS RULED that:

1. The scope of this proceeding is established as described herein.
2. This proceeding will be completed within 24 months of the date of this Scoping Memo.
3. Parties may file comments on the proceeding scope and schedule set forth here by July 16, 2014. Comments are not to exceed 10 pages, exclusive of the signature block(s).

⁹ Section 1801.3(b).

¹⁰ See generally section 1802 (defining terms related eligibility for compensation) and Section 1803 (limiting recovery to “reasonable” fees and costs, and requiring a claimant to show substantial contribution to a Commission decision, and to show hardship absent compensation).

4. Pursuant to Rule 7.5 of the Commission's Rules of Practice and Procedure, this ruling shall be placed on the Commission's Consent Agenda for approval of the change of categorization from ratesetting to quasi-legislative, and to reflect the determination that hearings are not necessary.

Dated July 1, 2014, at San Francisco, California.

/s/ CATHERINE J.K. SANDOVAL

Catherine J.K. Sandoval
Assigned Commissioner