



San Diego County Water Authority

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April 5, 2006

Ms. Brenda Edwards-Jones
U.S. Department of Energy
Building Technologies Program
Mailstop EE-2J, Room 1J-018
1000 Independence Avenue, SW
Washington DC 20585-0121

Re: "California Preemption Exemption Petition, Docket Number EE-RM-PET-100"

The San Diego County Water Authority (Water Authority) strongly encourages the U.S Department of Energy (DOE) to approve the Petition to Exempt from Preemption California's Water Efficiency Standards for Residential Clothes Washers.

The federal Register, Vol. 71, No. 24 (dated February 6, 2006) listed a number of issues to which the DOE was interested in receiving comments. The Water Authority is responding to four of these issues.

Are California's water interests "unusual and compelling," and how do they compare to those of the Nation and other States?

As noted in the petition, California has a persistent water crisis. Water demand grows as the population increases, while supplies are dwindling. The growth, economic and regional water supply situation in San Diego can be used to characterize the uniqueness of the unusual and compelling interests of the State of California. The population of San Diego County is projected to increase by 842,300 people between 2005 and 2030, for a total county population in excess of 3.8 million¹. This change represents an average annual increase of about 33,700 people, for an annual growth rate of roughly 1.1 percent.²

The Water Authority is a wholesaler of imported water, which consists of 23 member agencies. Our member agencies provide retail water supplies to 97 percent of the San Diego County population. The Water Authority's mission is to provide a safe and reliable supply of water to its member agencies serving the San Diego region. The San Diego region currently obtains approximately 80 to 90 percent of its supplies from water imported from Northern California and the Colorado River. During the fiscal year (FY)

¹ Draft 2005 Urban Water Management Plan, San Diego County Water Authority; December 2005; pg. 1-10

² Regional growth projections are based on the San Diego Association of Governments (SANDAG) 2030 Cities/County Forecast

A public agency providing a safe and reliable water supply to the San Diego region

MEMBER AGENCIES

Carlsbad
Municipal Water District

City of Del Mar

City of Escondido

City of National City

City of Oceanside

City of Poway

City of San Diego

Fallbrook
Public Utility District

Helix Water District

Olivenhain
Municipal Water District

Otay Water District

Padre Dam
Municipal Water District

Camp Pendleton
Marine Corps Base

Rainbow
Municipal Water District

Ramona
Municipal Water District

Rincon del Diabolo
Municipal Water District

San Dieguito Water District

Santa Fe Irrigation District

South Bay Irrigation District

Vallecitos Water District

Valley Center
Municipal Water District

Vista Irrigation District

Yuima
Municipal Water District

OTHER
REPRESENTATIVE

County of San Diego

2005, the Water Authority paid almost \$217 million to obtain and deliver these water supplies.³ This dependence on imported water supplies has made San Diego County vulnerable to shortages. Therefore, the Water Authority is taking a proactive approach to diversifying water supplies.

Any water shortages resulting in water supply cutbacks would have severe adverse impact on the local economy. Demand for water in the Water Authority's service area falls into two basic categories: municipal and industrial (M&I), and agricultural. M&I uses currently constitute about 80 to 85 percent of regional water consumption. Agricultural water, used mostly for irrigating groves and crops, accounts for the remaining 15 to 20 percent of demand. By 2030, total normal water demands are projected to reach 829,030 acre feet (AF), which represents about a 29 percent increase from the 642,152 AF of demand that occurred in fiscal year FY 2005.⁴

M&I demand can be subdivided into residential demand (water used for human consumption in the home, domestic purposes, and residential landscaping) and water used for commercial and industrial purposes. Based on SANDAG data, the 2004 composition of San Diego regional housing stock was approximately 61 percent single-family homes, 35 percent multi-family homes, and 4 percent mobile homes.

The area's diversified employment base includes telecommunications, electronics, computers, software, and biotechnology. High technology and bioscience related employment now exceeds 160,000 jobs. San Diego's gross regional product was forecast to reach \$151.1 billion in 2005, a 6.6 percent increase over 2004's \$141.7 billion estimate. The number of people actively working averaged 1.42 million in 2004, and that number was projected to rise by 2.1 percent in 2005, to 1.45 million.⁵ Compared to the pace of expansion recorded in the 1980s, the current growth is more moderate, and perhaps more healthy and sustainable.

Commercial water demands generally consist of incidental uses but are necessary for the operation of a business or institution. Major commercial water users include service industries, such as restaurants, car washes, laundries, hotels, and golf courses. Economic statistics developed by the San Diego Regional Chamber of Commerce indicate that almost half of San Diego's residents are employed in commercial (trade and service) industries. Industrial water consumption consists of a wide range of uses, including product processing and small-scale equipment cooling, sanitation, and air conditioning. San Diego also has a number of water-intensive industrial users, such as electronics and aerospace manufacturing. The tourism industry in San Diego County affects water usage within the Water Authority's service area not only by the number of visitors, but also through expansion of service industries and attractions, which tend to be larger outdoor water users.

³ San Diego County Water Authority 2005 Annual Report; pg. 20

⁴ Draft 2005 Urban Water Management Plan, San Diego County Water Authority; December 2005; pg. 2-1

⁵ Draft 2005 Urban Water Management Plan, San Diego County Water Authority; December 2005; pg. 1-9

San Diego County agriculture is a \$1.3 billion dollar per year industry, eighth in farm production value in the State.⁶ The coastal and inland valley areas of the county possess a moderate and virtually frost-free climate able to support a variety of sub-tropical crops, making the San Diego area a unique agricultural region. The primary crops grown for the national and international markets are avocados, citrus, cut flowers, and nursery products. To a lesser extent, local fresh market crops and livestock are produced in the Water Authority's service area. In recent years, agriculture has accounted for 10 to 20 percent of the Water Authority's total water demand depending on weather conditions. Irrigated agricultural land in the Water Authority's service area totals 73,769 acres. Agricultural customers are aggressively conserving water because of the limited supplies and the high cost of water.

Within the next five years, conservation is expected to make up ten percent of our water supplies. Since 2000, the Water Authority has annually conserved an average of 40,500 AF of water, through both funded conservation programs and legislated standards already set in California. Implementing the Tier 2 water efficiency standards for residential clothes washers in the State will save almost as much water as consumed annually by the City of San Diego, the second largest city in California.

Should the phrase "in the United States generally" be interpreted to include comparisons to regions as well as national averages? Are the water use issues in California substantially different in nature than those prevailing in other western states?

Using the plain interpretation of the words "in the United States generally", the comparison between California's interests and the interests of other states should be done in a broad manner based on national averages, not in a more specific manner based on regional comparisons. If Congress had intended regional comparisons to apply, it would have stated this in the statute. In addition, using national averages is consistent with the methodology used by the DOE to establish the Federal energy and water standards. The energy standards set for washing machines do not take into consideration regional and local concerns but were set based on national implications to the average consumer and did not specifically address implications to consumers regionally.

When considering the preemption application, the DOE should also note that there was no national standard set for water consumption for clothes washers because the "Department does not have the authority to prescribe a minimum water factor standard." Here, California Energy Commission is applying for a preemption waiver for a Federal standard that does not exist. While the Federal Law states that it preempts State law for energy consumption or water use, the water use factors only apply to showerheads, faucets, water closets, and urinals and do not apply to washing machines. The

⁶ Draft 2005 Urban Water Management Plan, San Diego County Water Authority; December 2005; pg. 1-8

⁷ Federal Register Volume 66, No. 9 Friday January 12, 2001, II. D. 7

requirement of where Federal law preempts state law is clarified in the Federal regulations that state that a Federal water use preemption applies only to standards set for faucets, showerheads, water closets and urinals.⁸

Although the intent of Congress was not to compare California's water use to other western states, California's water use issues are still substantially different in nature and magnitude from those in other western states. As stated in the preemption waiver application, California water consumers are currently using more water supply than is available. California has groundwater basins in overdraft, has granted more water rights from Sacramento River Delta than the amount of water that is physically available, and is taking Colorado River water beyond its maximum allotment. California has been instructed by the US Bureau of Reclamation to live within its means as it relates to the Colorado River and is taking a proactive approach to diversify water supplies. Failure to obtain adequate water supplies to replace anticipated cutbacks to the Colorado River supply will result in a severe economic impact to California.

Are there alternative approaches to clothes washer water savings that could achieve the same water savings in California as would be achieved by the California clothes washer standards?

Alternative approaches to clothes washer savings are already being implemented. To meet growing demands, the Water Authority and its member agencies have implemented long-term strategies to reduce the region's reliance on imported water by diversifying the supplies portfolio, and maintaining and operating a vast array of critical water facilities and conveyance systems.

Following a six-year drought beginning in 1987, the Water Authority began to diversify its water portfolio. The Water Authority's portfolio includes imported water, water transfers, seawater desalination, recycled water, local groundwater, and conservation. The costs for each acre foot of water from these supplies range from \$453 to \$13,000. Even at the high cost of developing new water supplies from water transfers, sea water desalination, local groundwater supplies, and recycled water, the Water Authority and our member agencies are still proactively pursuing and implementing all of these options. In addition, the Water Authority has implemented an Emergency Storage Project for surface water supplies which, when completed, will provide access to 90,000 AF of water in surface storage to be used for emergencies⁹ and will maximize use of local runoff from rain events which average less than 11 inches of rain annually. The Emergency Storage Project is a system of reservoirs, interconnected pipelines, and pumping stations designed to make water available to the San Diego region in the event of an interruption in imported water deliveries. The total cost of capital improvements to the Water Authority's supply system over the next five years is expected to exceed 3.2 billion

⁸ 10 CFR Ch. 11, §430.33

⁹ Draft 2005 Urban Water Management Plan, San Diego County Water Authority; December 2005; pg. 9-2

dollars.¹⁰ This does not include the amount being spent by each of our member agencies for improvements to their respective retail water systems.

Although San Diego is pursuing all opportunities to obtain a reliable water supply for our growing region, conservation continues to be the most cost-effective measure since it can be obtained at a price as low as \$200 for an acre foot of water. The Water Authority is a statewide leader of innovative programs in water conservation. In addition to providing incentives for indoor plumbing, we also have proactive conservation programs for commercial, industrial and institutional sites, outdoor irrigation, and landscape. Our efforts have been so successful, however, that many of the conservation programs implemented in the early 1990s are maturing, including programs for ultra-low-flush toilets, showerheads, and high efficiency washers. Those who wish to purchase high-efficiency clothes washers to save water or because it is environmentally correct have most likely done so. Therefore, we must pursue the next level of customers purchasing clothes washers. A water efficiency requirement in clothes washers would enable us to continue to capture the savings from water efficient machines.

The Water Authority has provided financial incentives to consumers to purchase water savings clothes washers since 1994. To date, over 51,000 clothes washers have been purchased through the Water Authority rebate programs. This considerable investment has resulted in a savings of almost 3,000 AF. But we need to have even greater savings, which water efficiency standards will enable us to generate. Clothes washers are the second highest water-using device in the residential household. Having a water efficiency standard for these machines will allow San Diego to recognize even more significant savings.

Is California's Petition's statement that water supplies are not "fungible" and that it is very difficult to transfer any water savings from one sector of the State to another accurate? Are there ways California can transfer water savings more easily?

Although in many cases water savings are not fungible, where those water savings are fungible, agencies in California are transferring water savings from one sector of the State to another. California's water use is intricately linked to high-energy costs and consumption. As the nation's largest water user with a vast water transportation infrastructure, California's water systems are uniquely energy-intensive due to pumping requirements to deliver volumes of water long distances, across mountain ranges, and over high elevations. The State Water Project, the nation's largest state-built water conveyance system of reservoirs, lakes, power plants, pump stations, canals, tunnels, and a 444 mile-long aqueduct, is the largest single user of electricity in the state. The amount of energy required to support the state's water delivery system and energy requirements associated with treating, pumping, and delivering water from water supply sources to population centers is of increasing concern throughout the state. This cost of delivery can reduce the ability to transfer water from one sector to another. It is clear that more

¹⁰ San Diego County Water Authority 2005 Annual Report; pg. 08

efficient water use will substantially reduce and avoid energy costs that would otherwise be expended.

San Diego County is the southern-most area of California and, as such, is at the bottom of the pipeline. Eighty to ninety percent of our water is imported from the Bay/Delta in Northern California and from the Colorado River. Supplies from the Colorado River will be reduced when California decreases its demand to stay within its allocation of 4.4 million AF of Colorado River water.

To help reduce California's demand on the Colorado River supply, the Water Authority currently partners with the Imperial Irrigation District (IID) to transfer water from agricultural communities to San Diego's urban region. IID will transfer up to 200,000 AF of conserved water annually to the Water Authority. An additional 77,700 AF will be provided through savings from lining the All American and Coachella canals. The cost to transfer water can be significantly higher than that of the regular imported water we receive. The direct costs include the sale price of the water, as well as, the conveyance, storage, and treatment costs.

There are also indirect costs to transfer water which may have unintended consequences to other water users, local economies, or the environment. Transferring water from agriculture to urban may produce extensive crop idling, which can reduce production and employment on both the farm and in secondary economic sectors. The reduced revenues could affect local governments disproportionately with potential impacts to spending on a wide range of services provided by local government. In order to implement the water transfer, the Water Authority is expending financial resources to mitigate these economic impacts.

Another concern is that the negotiated transfer water cannot be moved when export facilities are already pumping at full capacity. The IID transferred water requires access to the Colorado River Aqueduct owned by the Metropolitan Water District of Southern California, and if the Aqueduct is delivering a full capacity, the transferred water will not be available to the Water Authority.

Environmental concerns include the cumulative effects of transfers could impact habitats, water quality, and wildlife. The transfer of IID water creates continuing concern regarding the Salton Sea. Historically, excess water from the farms would replenish the Salton Sea. Farmers were being called upon to use water efficient practices so the conserved water could be transferred to San Diego. This would have resulted in significant increases in the total dissolved solids concentration of the Salton Sea and could eventually result in the Sea drying up. Increased salt concentrations and a reduced size of the Sea could end an essential stop in the bird migration chain. Because of this, the Water Authority will be contributing \$64 million to the Salton Sea Restoration Fund for environmental mitigation costs. The total cost to restore the Salton Sea could reach as high as \$7.5 billion. Even with the extensive costs and constraints, the water transfer from IID to the Water Authority is still a critical component of our future water supply.

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As you can see, California and the San Diego region are exploring every means possible to optimize our use of the State's water supply. Because of the critical water situation in California, we must pursue all alternatives to minimize water use including water savings from optimized washing machines.

We respectfully request that you approve the Petition to Exempt From Preemption California's Water Efficiency Standards for Residential Clothes Washers. It is critical to the San Diego region's economy and to our residents' quality of life for generations to come.

Sincerely,



Ken Weinberg
Director of Water Resources