

**DEPARTMENT OF WATER RESOURCES**

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December 15, 2010

Clerk of the Board  
Air Resources Board  
1001 I Street  
Sacramento, California 95814

Comments on the Proposed Regulation on the Cap-and Trade Regulation

The State of California Department of Water Resources (DWR) appreciates this opportunity to submit these comments on the Proposed Regulation for a California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms.

DWR is actively engaged in addressing global warming, its impact on water supplies and water management, and in exploring methods of adaptation. DWR supports the ARB's concurrent efforts to reduce GHG emissions through implementation of AB 32 and the proposed Cap-and-Trade Program. DWR is a member of the Climate Action Team and has taken action to reduce the emissions resulting from its operations in a variety of ways, including energy efficiency upgrades and termination of a contract for power from a coal plant.

DWR is a unique entity, with obligations to delivery water to 29 water contractors who eventually serve retail end water users. Given that our emissions have been included by the Air Resources Board in calculating the allowance budget, DWR should receive equitable treatment by receiving a direct allowance allocation. This would allow DWR to mitigate some of the economic impacts of this regulation similar to what is being provided to other public-owned utilities.

This point, as well as additional comments, is discussed in further detail in the attachment to this letter. Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read 'Veronica Hicks'.

Veronica Hicks, Chief  
State Water Project Planning and Risk Office

Attachment

**The Department of Water Resources**  
**Comments on the Air Resources Board Proposed Regulation for a**  
**California Cap on Greenhouse Gas Emissions and Market-Based**  
**Compliance Mechanisms**

**December 14, 2010**

The Department of Water Resources respectfully submits the following comments on the Proposed Greenhouse Gas Emissions and Market-Based Compliance Mechanisms Regulations. The comments address the regulation's impact on the programs of the Department of Water Resources and assert that DWR is exempt from the regulation, and, alternatively, that DWR should get direct allowances to mitigate impacts on water ratepayers. Other points are addressed as well.

**THE ROLE OF THE DEPARTMENT OF WATER RESOURCES**

DWR's mission is to manage the water resources of California in cooperation with other agencies, to benefit the State's people, and to protect, restore, and enhance the natural and human environments. DWR is charged with management of the State Water Project, the largest state-built, multi-purpose water project in the country.<sup>1</sup> The SWP was designed and built to deliver water, control floods, generate power, provide recreational opportunities, and enhance habitats for fish and wildlife. DWR has contracts with 29 local water agencies for delivery of up to 4.2 million acre-feet of water per year. Water deliveries serve 24 million people and provide irrigation for 750,000 acres of farmland.

DWR operates the SWP pumping and generating facilities to (in order of importance) (1) provide for safety and flood control needs; (2) comply with environmental regulations (3) meet water supply and delivery needs; (4) minimize cost of water deliveries; and (5) provide support for the electricity grid for the California Independent System Operator during periods of stress. All of DWR's power activities are conducted for the purpose of making water deliveries and to support the grid. Water deliveries are given priority over grid support in order to take advantage of all available windows of opportunity for water deliveries. This is especially important in recent years due to the increasingly stringent environmental constraints on

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<sup>1</sup> DWR is classified in the North American Industry Classification System (NAICS) under the Public Administration of Environmental Quality Program Sector (9241). This industry includes government establishments primarily engaged in the administration, regulation, and enforcement of water resource programs, flood control programs, drainage development and water resource consumption programs, and coordination of these activities at intergovernmental levels, and so forth.

pumping. The priority given to water deliveries, combined with the variability of water supply for hydropower generation, makes DWR's power usage and resources highly variable and difficult to predict from year to year.

DWR has a pumping capacity of 2,600 MW. In 2009, 5.4 million MWh were consumed to deliver 1.77 million acre-feet of water. The mix of power resources used for water delivery purposes changes each year depending on hydrology. In 2008, the resource mix was SWP hydropower (46%), wholesale market purchases (35%), exchange agreements (2%), and from the Reid Gardner coal-fueled power plant in Nevada (17%). In 2007, DWR notified the Nevada Power Company that the Reid Gardner contract will terminate on July 25, 2013.

Due to the variability of power scheduling and water deliveries, DWR will have surplus power. The power scheduled in advance can only approximate actual load in real time. This surplus electricity is not sold to retail energy providers but sold at wholesale into the CAISO power pool. Aside from these incidental sales, all electricity generated or purchased by the SWP is used to pump water.

Recently, annual power costs have ranged from \$350 million to \$600 million. Approximately 96% of the costs of the entire SWP, including power costs, are paid by the 29 local agencies holding long-term water supply contracts with the Department. Increased costs for power and transmission, coupled with reduced water availability, have raised the unit cost of water. For example, the Metropolitan Water District of Southern California has seen unit costs of \$500-\$800 per acre foot, and the Central Coast Water Agency's unit cost has been \$1,550 per acre foot. Many water contractors, especially agricultural contractors, are facing serious financial challenges due to these increased SWP operational costs.

DWR has long recognized that its mission is threatened by global warming and that, at the same time, DWR is uniquely positioned to lead and advance State interests in climate change adaptation and mitigation. It is clear that climate change poses monumental risks to DWR's public service mission through reduced Sierra snowpack, decreased water storage and delivery, and increased risk to Delta levees. In order to best respond to these threats, DWR has turned to evaluating its operations, policies and internal processes in order to reduce energy use and impacts to the environment and to orient the state to better adapt to changes brought by shifting climate patterns.

DWR has made substantial efforts towards meeting greenhouse gas (GHG) emission reduction goals. As a state agency which is required to consider and implement strategies in response to the administration's efforts to implement AB 32, DWR has approved a Sustainability Plan that includes a number of steps to reduce its GHG emissions. DWR is a member of the Climate Action Team. DWR has implemented an energy efficiency program that entails refurbishment or replacement of hydroelectric units at SWP facilities, and which increased the efficiency of these units from an average of approximately 89.5% to as high as 93.3%. DWR anticipates that upon completion in 2011, the two energy efficiency projects will reduce GHG emissions by 48,500 metric tons of CO<sub>2</sub> annually. DWR is evaluating the feasibility of additional energy efficiency upgrades at Edmonston Pumping Plant, which would start in 2013 and extend

through 2020. In addition, DWR is committed to procuring renewable energy to reach an emission target of 80% below 1990-level emissions by 2050, and will meet the goal of 20% reduction below the 1990-level by mid-2013, nearly seven years in advance of the 2020 target date.

DWR's power purchases are limited, under Water Code Section 142, to those meeting the same GHG performance standards applicable to local publicly owned electric utilities. Under this standard, any new contract must be for power that emits 1,100 lbs or less CO<sub>2</sub> per MWh (20 Calif. Code Reg. Section 2900 et seq.).

DWR anticipates substantial cost increases due to actions taken to reduce greenhouse gases as well as the increased price of market power expected to occur when the cap and trade regulations go into effect. DWR's priority goal of facilitating water deliveries makes it uniquely constrained in its ability to change its power procurement and usage practices. It is not possible to revise or reduce water delivery schedules to accommodate power price fluctuations without confronting serious legal, contractual, fiscal and environmental predicaments. Although the SWP water contractors are obligated to pay nearly all costs of the SWP, including power costs (which can be as high as half their bill), their payments are made from rates imposed on their water users. Possible cash-flow problems at both the state and local level could arise if compliance costs under this regulation are unexpectedly high. In addition, there would undoubtedly be adverse economic impacts in the resulting increase in water costs that urban and agricultural water users would face.

## **COMMENTS ON THE PROPOSED DRAFT REGULATION**

- 1. DWR has an independent obligation to reduce GHG; regulation of DWR is improper, unnecessary, and inconsistent with the purposes of AB 32**

DWR plays a unique role in California as a state agency that generates and purchases power at a wholesale level. It does not make retail sales, and is not an independent private power producer an investor-owned utility, or a local publicly owned utility. The focus of the ARB's regulatory efforts, naturally, has been on the primary players in California's energy market. Attempts to place DWR in a category with other entities are misguided. DWR deserves to be considered accurately, and in its proper role.

Viewing AB 32 in light of DWR's status as a state agency, it is clear that no regulatory authority over DWR was contemplated under Parts 4 and 5 of AB 32. Indeed, AB 32 frequently calls out the special roles of state agencies in greenhouse gas reduction efforts, and AB 32 contains many references to state agency responsibilities and collaboration. Regulations promulgated under AB 32 needs to reflect this distinctive role for state agencies such as DWR.

For example, "It is the intent of the Legislature that the State Air Resources Board coordinate with state agencies...in implementing this division." (Section 38501(f).) The very next paragraph mandates specific consultation with the CPUC on electricity and natural gas (Section

38051(g).) If the Legislature had intended to exclude DWR from "state agencies," it could have done so, just as it expressly named the CPUC.

The Act also addresses state agencies' independent efforts to reduce greenhouse gas emissions. "All state agencies shall consider and implement strategies to reduce their greenhouse gas emissions." (Section 38592(a).) As noted above, DWR has made ample commitments to reducing GHG and the imposition of a regulatory mandate is unnecessary to assure that DWR meet AB 32 goals.

AB 32 also states: "Nothing in this division shall limit the existing authority of a state entity to adopt and implement greenhouse gas emissions reduction measures." (Section 38598(a).) The Legislature recognized that state agencies had already formed the Climate Action Team, and it affirmed the Climate Action Team's role in coordinating overall climate policy (Section 38501(i); Executive Order S-3-05.). When AB 32 was enacted, DWR an active member of the Climate Action Team and developed its own GHG reduction measures.

Significantly, AB 32 prohibits the ARB from altering any programs administered by other state agencies for the reduction of greenhouse gas emissions:

Nothing in this part or Part 4 (commencing with Section 38560) confers any authority on the state board to alter any programs administered by other state agencies for the reduction of greenhouse gas emissions.

(Section 38574.)

Against this background of collaboration and mutual responsibility, there is no direct evidence of legislative intent that any state agency be subject to ARB regulation under AB 32. Indeed, the legislation is clear in setting a distinct role for state agencies.

It is noteworthy that the ARB's method of including "imported electricity" as a greenhouse gas emissions source was not introduced in legislation but was developed by the ARB in order to implement AB 32. DWR's only activity triggering a surrender obligation under the regulations is based on the "first deliverer" method of identifying deliveries of imported electricity. DWR does not object to this methodology, but points out that as applied to DWR it appears to exceed ARB's authority.

Excluding DWR from this regulation would be consistent with AB 32's directive to "consider the significance of the contribution of each source or category of sources to statewide emissions" (Health & Safety Code Section 38562(b)(9)) and to "take into account the relative contribution of each source of GHG" (38561.) The emissions attributable to DWR's final 19 months of deliveries from Reid Gardner are not a significant contribution to statewide emissions, and no other DWR activity would make it a "covered entity" under the regulation.

The regulation should expressly exclude DWR. DWR suggests the following addition and deletion:

Section 95811(h): This article does not apply to the California Department of Water Resources.

Section 95802(a)(59): "Electricity importers" are marketers and retail providers that hold title to imported electricity. For electricity delivered between balancing authority areas, the entity that holds title to delivered electricity is identified on the NERC E-tag as the purchasing-selling entity (PSE) on the tag's physical path, with the point of receipt located outside the state of California, and the point of delivery located inside the state of California. Federal ~~and state~~ agencies are subject to the regulatory authority of ARB under this article, and include Western Area Power Administration (WAPA), and Bonneville Power Administration (BPA), and California Department of Water Resources (DWR). When PSEs are not subject to the regulation authority of ARB, including tribal nations and state agencies, the electricity importer is the immediate downstream purchaser or recipient, if any, that is subject to the regulatory authority of ARB.

**2. Disparate treatment of DWR is not warranted and DWR should be given free allowances**

Implementation of AB 32 needs to be done "in a manner that is equitable" (Section 38562(b)(1)). There is no rational justification for treating DWR as an independent, for-profit wholesale power producer. DWR owns no power plants; DWR only enters into wholesale power sales when its load unexpectedly drops, resulting in surplus power. All DWR power transactions are dedicated to acquiring energy necessary to make water deliveries. DWR does not compete with independent power producers for customers because it dedicates all the power it generates to move water, and acquires more power as needed. The SWP is a net buyer of power; its operations result in net pumpload demand for energy that must be procured in the electricity market. Indeed, having issued tax-exempt revenue bonds, DWR is prohibited from undertaking profit-making activities which would jeopardize the tax-exempt status of its bonds.

It would be equitable to treat DWR the same way POU's are treated. Like a POU, DWR is a governmental entity providing a public service. All revenues are required to go to costs associated with providing that service. Many POU's engage in activities identical to DWR: they have hydropower generation, make market purchases of energy, use power to pump water, and deliver water to water users. While DWR provides no retail service of either water or electricity, this distinction does not justify disparate treatment.

DWR understands that one component of the cap and trade regulation is the mitigation of economic impact on electricity consumers, and the granting of free allowances to IOUs and POUs is an effort to achieve that mitigation. However, DWR's ratepayers are also entitled to mitigation of the economic impacts of this regulation. As a wholesale water deliverer, DWR lacks the flexibility other electricity users might have to modify its practices. As noted above, DWR's priority is water deliveries and carbon price mitigation is subordinate to those water deliveries. In addition, the trail of costs from DWR's incurred expenses to the ultimate water user is so tangled and time-delayed that it cannot be assumed that a water user will recognize a power price signal and react by consuming less water, and that lower water consumption would consequently reduce GHG. Without proof of that connection, imposing a surrender obligation on DWR does not reasonably lead to an expectation that AB 32 goals will be achieved. The obligation is merely a financial penalty. The money that would be spent on allowances to meet the surrender obligation could be better spent on achieving the Department's GHG reduction goals already underway. If DWR is not excluded from the regulation, it should receive free allowances.

DWR proposes that the proposed regulation should be amended as follows, if the suggestions under comment #1, above, are not adopted:

Section 95890 (c) Eligibility Requirements for the Department of Water Resources. Pursuant to Section 95892(f), the Department of Water Resources shall be eligible for direct allocation of allowances if it has complied with the requirements of the MRR and has obtained a positive or qualified positive verification statement for the prior year pursuant to the MRR.

Section 95892 (f) On January 1 of each year during the first compliance period, the Executive Officer shall deposit in the Department of Water Resources' compliance account allowances in an amount equal to DWR's MTCO<sub>2e</sub> emissions reported pursuant to the MRR in the preceding year.

### **3. The regulation does not recognize DWR's early action in terminating the RG Contract**

AB 32 mandates that entities that have voluntarily reduced their greenhouse gas emissions receive *appropriate credit* for early voluntary reductions. DWR is voluntarily terminating its contract for energy from the Reid Gardner power plant in Nevada. The Climate Action Team cited this as a discrete early action (see "Climate Action Team Proposed Early Actions to Mitigate Climate Change in California, at page 6), and that was referenced in the Air Resources Board's report on early actions. AB 32 requires that DWR be awarded some form of credit for this early action. An appropriate credit would be a grant of free allowances to permit DWR to meet its surrender obligation for the remainder of the contract's term, to July of 2013. This would be a sensible, cost-neutral remedy which would protect DWR's reasonable expectations of credit and mitigate in part the financial impact DWR will suffer due to early termination

action and alternative procurement. The proposed amendment to the regulation in comment #2, above, would be an appropriate method to recognize the early action credit for DWR. DWR is open to discussing other forms of appropriate credit if the Board feels another methodology merits consideration.

**4. The regulation is not cost-effective because its application to DWR's programs does nothing to further GHG reduction goals**

AB 32 requires regulations to be cost effective and to minimize costs and maximize total benefits to California (Section 38562). In addition, the mandated reduction must be in addition to any other greenhouse gas emission reduction that otherwise would occur. (Section 38562). DWR's surrender obligation and associated costs will be attributable only to the emissions related to the importation of energy from the Reid Gardner power plant for the period January 2012 through July 2013. This contract is already scheduled for termination, effective July 2013. Imposition of surrender obligations on DWR due to Reid Gardner will not induce the contract's termination; that has already been decided. Procurement of alternative energy to replace Reid Gardner will need to meet the performance standard mandated by Water Code Section 142. The only consequence of naming DWR as a "covered entity" under the proposed regulation is to impose on DWR the cost of allowances necessary to surrender the compliance obligation. The reduction in GHG is one that would "otherwise occur" and accordingly cannot be considered an appropriate reduction under AB 32's Section 38562.

In addition, it cannot be considered cost-effective. "Cost-effectiveness" means "the cost per unit of reduced emissions of GHG adjusted for its global warming potential." (Section 38505(d).) The regulation does not reduce these emissions because they are already planned for reduction independent of the regulation. The regulation merely imposes a cost without reducing GHG, and accordingly is not cost-effective. It would be more cost effective to allow DWR to use its resources to fund other GHG reduction or mitigation strategies.

The regulation is also not cost-effective because the expenditure of money on allowances will do nothing to further AB 32 goals. As noted above, the linkage between DWR's purchase of allowances and individual consumers' water use is very attenuated; there is no connection with retail electricity use. There should be a more direct link to justify the expense of purchasing allowances.

**5. It is inequitable, ineffective, duplicative, and improper to burden water ratepayers with additional costs and pass the resulting revenues on to electric ratepayers**

DWR uses electricity to produce a "product," water, much the same as a manufacturer uses electricity. Like a manufacturer, DWR will pay a higher price for market energy once this regulation is in place. Similar to a manufacturer whose product reflects the higher price of electricity, DWR will pass those costs on, first to water contractors who will then pass the costs



on to the end users of water. There is no justification for imposing an *additional* cost on DWR through a separate compliance obligation which DWR will necessarily pass on to its water contractors, and ultimately to the consumers of water. No such surcharge will be imposed on the end user of manufactured products. The regulation and accompanying ISOR contain no justification for this duplicative cost and disparate treatment. No AB 32 goals are furthered by making this distinction.

The consequence of imposing a surrender obligation on DWR will be to transfer funds from water ratepayers to electricity ratepayers. DWR will need to purchase allowances, and the vast amount of allowances available at auction will belong to IOUs or POUs. The IOUs and POUs are required to utilize the auction proceeds for the benefit of their ratepayers. The regulation and accompanying ISOR contain no justification for this transfer.

DWR is implementing ambitious programs to achieve a 20% reduction in water use by 2020. The additional expense of this market mechanism incurred by water ratepayers will reduce funds available for important water conservation efforts.

**6. DWR faces financial risk and undue competition because the availability of allowances at a reasonable price is not assured**

DWR is concerned that in the early years of cap and trade, when its surrender obligation will come due, there will be too few allowances available. It is not clear that by the time DWR must surrender its compliance instruments there will have been adequate opportunity to purchase allowances at a reasonable price. Without a price cap on the allowances, large price spikes are possible. DWR would be competing against independent power producers, who will be able to pass the cost of allowances on to their customers (one of whom is DWR). Against the background of public budgeting and revenue collection, which are conducted in pre-established time periods, DWR may face fiscal difficulties and cash flow problems in making purchases of high-value allowances. DWR requests that the ARB consider excluding DWR from the regulation to avoid these adverse impacts, reducing the penalty for noncompliance, or structuring the auctions in a way that this threat is reduced (perhaps with a set-aside of allowances for public agency use or a price cap).

**7. The environmental impacts of imposing a surrender obligation on DWR were not evaluated**

If DWR is required to surrender compliance instruments, it will need to pass these costs on to its water contractors, who in turn will pass the costs on to the end-users of water. An analysis should be conducted to determine the environmental impacts of this regulation. Water is integral to the agricultural sector and important for environmental needs. As reported in the California Water Plan, Update 2009:

California is facing one of the most significant water crises in its history – one that is hitting hard because it has many aspects and consequences. Reduced water supplies and a growing population are worsening the effects of a multi-year drought. Climate change is reducing our snowpack storage and increasing the frequency and intensity of floods. Court decisions and new regulations have resulted in the reduction of water deliveries from the Delta by about 20 to 30 percent. Key fish species continue to decline. In some areas of the state, our ecosystems and quality of underground and surface waters are unhealthy. The current global financial crisis will make it even more difficult to invest in solutions. We must act now to provide integrated, reliable, sustainable, and secure water resources and management systems for our health, economy, and ecosystems.

The regulation imposes an additional burden on DWR and California's water users without acknowledging this water crisis nor evaluating the impact of this burden under all existing circumstances.

**8. The economic impacts of imposing a surrender obligation on DWR were not evaluated.**

The fiscal impact statement associated with the regulation incorrectly assumes that Reid Gardner electricity will be imported only until December 31, 2013. However, the termination date is July 25, 2013, six days short of 19 months. The fiscal impact statement should be revised accordingly.

In addition, the fiscal impact does not account for delays in billing and collecting charges built in to the long-term SWP water supply contracts and resulting mismatch in costs of purchasing allowances and incurring surrender obligations which could have a fiscal impact to DWR.

In addition, as noted above, the economic analysis does not account for the additional burden imposed on water users as a result of requiring DWR to surrender compliance instruments. The complex relationship between DWR's electricity use and attainment of AB 32 goals of reducing GHG emissions through a carbon price signal should be explored.

**9. The penalties proposed should be modified to avoid unnecessarily punitive financial impacts on DWR**

The regulation's fourfold penalty for a failure to timely surrender compliance instruments is unwarranted, at least for public agencies. If DWR is subject to this regulation, there can be no reasonable expectation that a threat of penalties is necessary to assure compliance. DWR is already committed to terminating the Reid Gardner contract and actively pursuing renewable energy alternatives. Moreover, DWR, like most public agencies, never considers ignoring or

disobeying the law to be an option. The only scenario in which such a failure is conceivable would be a complete lack of available allowances or an unexpected and extremely unaffordable allowance price. In either case, a fourfold penalty is no remedy. A public agency's failure to meet a legal obligation to surrender allowances would trigger various disclosure requirements along with concomitant adverse consequences to budget planning, water rates, cost allocation, and water contract administration. The inordinately high penalty amount would only exacerbate attempts to remedy such a situation.

The regulation should be amended to delete the fourfold penalty for the Department of Water Resources. An amendment is suggested below:

Section 95857 (e) This section does not apply to the Department of Water Resources.

## **CONCLUSION**

Under AB 32, DWR's unique status as a state agency requires that it be exempt from this regulation. Alternatively, DWR should receive free allowances to mitigate for the impact on water ratepayers. AB 32 also requires that regulated parties be treated equitably and that early action receive appropriate credit. AB 32 requires the proposed regulation be cost-effective, and applying the regulation to DWR is not cost-effective. The proposed regulation results in a transfer of funds from water ratepayers to electricity ratepayers, which cannot be justified. The proposed regulation poses undue financial risk to DWR. Environmental and economic impacts on DWR and water users were not addressed. Finally, the imposition or threat of a fourfold penalty on public agencies is unduly punitive and unnecessary to achieve compliance.