CALIFORNIA ENERGY COMMISSION 1516 NINTH STREET SACRAMENTO. CA 95814-5512 www.energy.ca.gov



March 27, 2014



Dear Electricity Generation Owner,

California is facing one of the worst droughts in 50 years, and dealing with the impacts of the drought will require every Californian to pitch in. In these unprecedented times, the state is working with every sector of California to make sure that everyone is prepared for continued extreme drought conditions.

As an owner/operator of a power plant within California, you have a critical place in the energy infrastructure of the state. As the drought persists, it is important that you stay apprised of how the drought might impact your operations.

Right now, there are three key things you should be doing to prepare for continued dry conditions:

- Know your license, permit, or certification and how it affects your water supplies. The conditions of operations on your license, permit, or certification will indicate any limitations on water sources and quality; it may also list alternative water sources available to your plant. If you have not already, you should explore options for alternate sources of water and develop a backup plan for your plant. Since finding alternate water sources may require an amendment to your license, permit, or certification, you should be proactive and contact your licensing, permitting, or certifying authority to explore options for ensuring your operation this year and next.
- 2. <u>Talk to your water supplier(s)</u>. After reviewing your license, permit, or certification, you should contact your water supplier(s) and discuss the circumstances under which they may curtail or deny water supplies to your power plant. If you have water stored in a groundwater bank, contact the bank, and verify the availability of that water and any possible exceptions or issues associated with accessing it, should it be needed later this year. You should also evaluate whether water supply and allocation curtailments to water providers may affect your water conveyance system and its ability to deliver water to your site.



- 3. <u>Conserve water</u>. As Californians, everyone must work to conserve our scarce water resources. All power plants should practice water conservation as a part of good citizenship, best business practices, and environmental stewardship. Attached to this letter are a few suggested conservation practices for you to consider implementing where appropriate for your plant.
- 4. <u>Notify relevant agencies if production is affected.</u> Using some conservation methods may result in limits to electricity production. Please make your power purchaser, the California Independent System Operator Corporation, and the Energy Commission aware of any such limits.

The California Energy Commission, in consultation with the State Water Resources Control Board, the California Public Utilities Commission, and the California Independent System Operator Corporation, will work with owners/operators of power plants on a case-by-case basis to identify those plants where there are real concerns about the reliability of continued operation under these unprecedented drought circumstances.

If you have any questions about conservation or your license, permit, or certification and its conditions of operation, please contact Paul Marshall, 916-654-4059, or <u>Paul.Marshall@energy.ca.gov</u>.

Sincerely,

Robert P. Oglesby Executive Director

Enclosure

Water Efficiency and Conservation Suggestions

The ongoing drought affects all Californians, and everyone is being asked to conserve and use water more efficiently. As smart business decisions, many power plant operators have already implemented a variety of water conservation and efficiency measures at their plants. However, given the severity and unknown duration of the drought, we urge you to consider additional efforts to conserve, and tell us about water conservation measures that you have already implemented so we can share them with the energy generation sector. Below are some suggested efficiency and conservation measures that can be implemented at your plant.

Landscape and Potable Water Uses

- 1) Reduce or eliminate water used for landscaping where feasible.
- 2) Change landscaping to drought tolerant species.
- 3) Fix leaks in irrigation systems and ensure systems are operating properly.
- 4) Switch from potable water use to recycled water use for irrigation.
- 5) Install water efficient devices in kitchens, restrooms, and administrative areas.
- 6) Evaluate potable water-use habits and how this use can be reduced.
- 7) For more suggestions, please visit SaveOurH2O.org

Water for Plant Operation

- 1) Replace potable water supplies with recycled water or degraded water supplies.
- 2) Increase cycles of concentration in wet cooling towers and/or reduce drift rate.
- 3) Reduce or eliminate the use of inlet air cooling (e.g., install mechanical chillers).
- 4) Reduce or eliminate the use of wet NOx injection (e.g., install Dry Low NOx systems).
- 5) Increase the use of pre- and post-treatment processes to recycle water for further use.
- 6) Increase use of Zero Liquid Discharge systems to recycle project wastewater for process use and reduce wastewater discharge.
- 7) Replace wet cooling systems with dry cooling systems or Wet Surface Air Coolers.
- 8) Replace old equipment to increase overall thermal efficiency.
- 9) Collect site storm water or gray water into treatment processes for further use.