

CALIFORNIA ASSOCIATION of SANITATION AGENCIES

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August 7, 2015

Mary Nichols, Chair California Air Resources Board 1101 "I" Street Sacramento, CA 95814

Re: Comments on the 50 Percent Renewable Portfolio Standard

Dear Chair Nichols:

The California Association of Sanitation Agencies (CASA) supports establishing a 50 percent Renewable Portfolio Standard (RPS) in California. Doing so will continue to decarbonize California's electricity and fuel sectors, reduce greenhouse gas emissions and other air emissions, create jobs and economic development, and help to meet other environmental and economic goals. Bioenergy can play a critical role in meeting the 50 percent RPS as it provides much-needed flexible generation power and short-term energy storage, both of which help to integrate intermittent renewables. Bioenergy can also help to meet other important state policies including organic waste diversion, wildfire reduction, reducing Short-Lived Climate Pollutant emissions, and job creation and economic development in disadvantaged communities.

CASA is a statewide association of municipalities, special districts, and joint powers agencies that represent more than ninety percent (90%) of the sewered population of California. CASA has long been a proactive leader on wastewater treatment, recycled water, air quality, biosolids management, renewable energy, and climate change mitigation issues. CASA represents publicly owned wastewater treatment plants (POTWs) that are already producing bioenergy and are part of the solution. Our members can maximize the use of existing infrastructure in anaerobic digesters and power generating units to increase bioenergy and help the state achieve its existing legislative mandates and a revised RPS of 50%. As an example, the acceptance of hauled-in organic waste such as Fats, Oils, and Grease (FOG), food waste (source separated, etc.), vegetative food waste (cannery, food processing etc.), and others for anaerobic digestion at POTWs is a steadily increasing practice, and an important management option for this valuable waste stream. Moving forward, this practice will be an integral component of, and POTWs a key partner in, achieving at least six significant state objectives by 2020: (1) to reduce the release of SLCP's to the atmosphere; (2) to provide 33% of the state's energy needs from renewable sources; (3) to recycle 75% of the solid waste generated in the state: (4) to achieve 1990 levels of carbon dioxide equivalent emissions: (5) to reduce the carbon intensity of transportation fuel by 10%; and, (6) the Governor's Healthy Soils initiative.

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Numerous studies have shown that California can meet a 50 percent RPS cost-effectively and safely, but doing so will require increasing the diversity of California's renewable portfolio, the amount of flexible generation power and energy storage, to be able to integrate large amounts of intermittent renewables like wind and solar power. Bioenergy can provide flexible generation power – power that is available when needed and that can ramp up and down quickly. Bioenergy can provide distributed generation power and be used in place of natural gas to reduce the carbon emissions from existing natural gas power plants. Finally, biogas can provide energy storage for a few hours to a few days, for use when needed to generate power.

In addition to providing flexible generation power and energy storage, bioenergy can help to meet multiple pillars of California's climate change strategy and other important state policies as noted above and here, including:

- Significantly reducing Short-Lived Climate Pollutants such as methane and black carbon,
- Helping to achieve California's organic waste diversion goals,
- Reducing pollution in disadvantaged communities that suffer disproportionately from the impacts of fossil fuel use,
- Reducing the risks and impacts of catastrophic wildfire (note that biosolids can help reclaim fire ravaged land and reduce the potential severity of future fires),
- Helping to maintain and restore carbon sequestration in California's forests and agricultural lands through the land application of biosolids and other organics, and
- Producing 2 to 6 times as many jobs as fossil fuel gas¹

Achieving these benefits will require more than adopting a 50 percent RPS by 2030. It will require removing a number of critical barriers to bioenergy development and distributed generation.

1. Simplify, Accelerate, and Reduce the Costs of Interconnection.

The interconnection process is one of the biggest barriers to distributed generation in generally and bioenergy production in particular. The costs of interconnection vary widely and cost estimates can vary wildly even during a single project's development. Several recent bioenergy projects have received cost estimates that increased 10-fold or more during the project's development. The costs are neither predictable nor transparent and present a huge risk to project developers, increasing the ultimate cost of distributed generation to ratepayers since increased risk increases the cost of financing and developing projects. This is especially difficult for CASA members who are public facilities having to safeguard rates and ratepayers to whom they provide the services.

¹ University of California, Berkeley, Green Job Calculator, available at: http://rael.berkeley.edu/greenjobs.

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CPUC staff developed a proposal in 2014 for examining interconnection cost certainty that would provide much greater predictability for project developers and reduce overall project costs because the proposal would reduce risks. The CPUC should adopt the proposal without further delays - this will benefit many distributed generation projects in addition to bioenergy projects.

In addition to cost certainty (or at least predictability), the CPUC must adopt guidelines for interconnection data sharing, timelines for the interconnection process, and accountability measures for the utilities.

2. Give Full RPS Credit to Renewable Power that is Used Onsite.

California's RPS was adopted to provide specific environmental and economic benefits directly to California, including increased energy independence, job creation, pollution reduction and other benefits. In order to maximize these benefits for California and its ratepayers, the RPS treats different sources of renewable power differently, providing the greatest incentives for renewable power that is produced and used in California and the lowest value to renewable power that provides fewer in-state benefits.

The goal of creating different "buckets" under the RPS was to maximize the benefits for California. Unfortunately, renewable power that is generated in California and used onsite, rather than exported to the grid, ended up in the lowest value bucket of the RPS. The RPS buckets were never intended to distinguish between renewable power used onsite or exported to the grid. In fact, renewables that are used onsite in California may provide even greater benefits than exported power since they relieve grid congestion and have no power line losses, significantly increasing the efficiency of the power.

Renewable power that is generated in California and used onsite should be given the highest value under the RPS to increase distributed generation, reduce grid congestion and cut transmission costs and power losses. The vast majority of CASA members are in this situation where they produce power for on-site use and reduce or, in some cases, eliminate their imported power from the grid.

3. Adopt Policies and Pricing Mechanisms that Value Flexible Generation Power and Non-Energy Benefits of Bioenergy.

The CPUC is currently developing an integration cost adder to better reflect the true costs of integrating intermittent renewables into the electricity grid. Doing so should help to incentivize the development of flexible generation power and energy storage. Revising the definition of "Least Cost/Best Fit" to include a wider range of costs and benefits will also help to promote flexible generation power and to diversify California's renewable energy portfolio. These are important policies that must be developed and adopted quickly, and reassessed periodically, to ensure that California's portfolio is more diverse and contains more flexible generation power as the state moves from 33 to 50 percent renewables.

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4. Continue to Invest in Research, Demonstration, and Deployment of Renewable Energy Technologies.

California has led the world in developing and demonstrating clean energy technologies, thanks in large part to the Public Interest Energy Research (PIER) and Electricity Program Investment Charge (EPIC) programs implemented by the California Energy Commission (CEC). The CEC has invested critical research and demonstration dollars to help accelerate the development and deployment of clean energy technologies. While solar and wind power are now mature technologies, small-scale bioenergy, energy storage and other forms of renewable energy are still developing and need continued investment to achieve the efficiency, price reduction and scale that solar and wind power have achieved. These investments are particularly important while bioenergy and energy storage are still more expensive than other forms of distributed energy resources.

Both CalRecycle and the California Department of Food and Agriculture received many times more proposals for projects than they could fund. Increasing this funding would help to accelerate development of these flexible generation projects that provide numerous other benefits. The State Water Boards who are the primary regulatory agency for CASA members should also be allocated funding that can be used to fund research and demonstration projects at POTWs. Funding is needed for: technology to reduce emissions from stationary sources which will allow the continued generation of bioenergy at POTWs in certain air districts, quantification of long-term carbon sequestration from the use of biosolids when applied as a fertilizer or soil amendment, and the use of biosolids to reclaim fire ravaged land and reduce the potential severity of future fires.

We look forward to continuing to work with the state to develop and implement a 50 percent RPS. Please don't hesitate to contact me with any questions or to request more information at gkester@casaweb.org or at 916-844-5262.

Sincerely,

Greg Kester

Director of Renewable Resource Programs

Trey Hester

cc: Cliff Rechtschaffen, Senior Advisor to Governor Brown Michael Picker, President, CPUC Carla Peterman, Commissioner, CPUC Robert Weisenmiller, Chair, California Energy Commission