Comments of California Environmental Justice Alliance on 2011 IEPR: Committee Workshop on Renewable, Localized Generation

Docket # 11- IEP – 1G

May 23, 2011

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Subject: Renewables

Thank you for the opportunity to participate in the panel discussion at the May 11, 2011 Committee workshop. We wanted to follow up with some further comments about how we believe the Commission should approach the implementation of the Governor's 12,000 MW Distributed Generation goals.

As we relayed at the panel discussion, Environmental Health Coalition and Communities for a Better Environment are members of the California Environmental Justice Alliance (CEJA), a coalition of six grassroots environmental justice organizations representing different regions of California. We are all dedicated to improving the quality of life in the low-income, communities of color we serve and empowering our community members to have a voice in decisions that affect their lives.

Unfortunately, our communities have suffered the most under the fossil-fuel energy economy. These are the communities that sit adjacent to freeways, diesel operations, oil refineries, power plants, industrial facilities and other polluting sources. They also face new health threats, for example, from oil industry efforts to refine dirtier grades of crude oil (see Appendix A "New CBE research proves higher refinery emissions from lower quality oil" fact sheet).

According to the US Environmental Protection Agency, the Tesoro refinery in Wilmington produced 211,332 pounds of toxic chemicals in 2008; while Valero facilities also in Wilmington produced more than 80,000 pounds of toxics in 2008. Although Wilmington is home to the largest concentration of refineries in the state, Wilmington has more than 45,000 Latino/a residents and 27 percent of residents live in poverty. In California, communities residing within 2.5 miles of major air polluting plants are 63% African American, Latino/a, and Asian/Pacific Islander.

Communities residing in the most impacted communities suffer from allergies, breathing problems, headaches, lack of sleep, extensive lung illness, and nausea. The resulting respiratory impacts and other health ailments from these pollution sources, as well as the large amount of dirty energy infrastructure, have burdened these communities for too long and exacerbated their diminishing economic and social opportunities.

One of the most important and exciting opportunities in our communities is the potential to develop a thriving local green energy economy. Not only do we believe that investment in our communities can lead to neighborhood revitalization and an improved sense of pride and place, but also it can offer a new relationship between energy and the economic development of a community. Instead of starving these communities of valuable assets and local revenue by shipping wealth away from the neighborhood and into distant corporate coffers, and contributing to enormous health costs, we can bring in prosperity and opportunity to local energy businesses and entrepreneurs.

The key to making these local economic benefits materialize is to ensure these communities are at the front line of benefits reaped as the green economy grows -- instead of merely hoping and waiting for the prosperity and opportunity to trickle down. This requires setting up specific policy goals aimed at investing in small-scale systems located in underserved urban and rural communities.

Specifically, we have these recommendations:

1. Set clear targets and deadlines. The goal of this program is to develop 12,000 MW of distributed generation. Let us make certain that this is a firm target with clear timelines and accountability for compliance. We should not allow the program to be reduced or to have soft targets that will never be achieved. Furthermore, the commission should integrate the 12,000 MW target into the IEPR forecasts, net short calculations, and planning for electric power infrastructure such as transmission. And the commission should work with the CPUC to adopt this target as a formal utility program, and require investor-owned utilities to include this target in their Long-Term Procurement Plans.

2. Be clear that this goal is achievable. 12,000 MW is reasonable and doable. We already have 6,000 MW of DG potential in existing programs. Let us continue this progress. We recognize the technical and institutional challenges to implementing this new energy paradigm, and we want to work with all the stakeholders to address these hurdles. But they are surmountable. As the KEMA reports demonstrate, we have much to gain from the lessons and breakthroughs achieved by Germany and Spain. We encourage the CEC, CALISO and the utilities to focus less on renewable resources as a problem, and more as a huge economic, environmental and national security opportunity.

3. Make certain to get things right with real renewable energy resources only. Our 12,000 MW target should be with real renewable energy resources. We would get off on the entirely wrong foot if the state adopts the utility proposal to include Combined Heat and Power (CHP) as a renewable resource. CHP targets currently being considered would take up nearly all the remaining capacity above the 6,000 MW of existing renewable DG programs. Let's keep our eyes on the prize and not include fossil-fuel resources in the governor's increased target.

4. Focus investment in communities that need it and deserve it the most. We need to ensure that much of our renewable portfolio benefits communities that have been on the front lines of negative impacts from fossil fuel energy development. Let's turn this around and focus on small-scale renewable placed on rooftops, parking lots and vacant lands, looking especially close at commercial and multifamily rooftops. Concretely, we recommend that at least 50% of the 12,000 MWs come from projects located in and on commercial/residential buildings/parking lots as well as from ground mounted locations, using a variety of renewable energy technologies, and benefitting both urban

and agricultural communities. As you are aware, this is consistent with recent recommendations from the LA Business Council. We need to create policy mechanisms to make small-scale work, which includes such ideas as revamping CSI to capture more low-income homes and multifamily buildings, and adopting a feed-in-tariff that can make small-scale projects affordable and effective. Feed-in tariffs are ideal because—unlike net metering— they provide actual cash revenue, and allow a much wider range of people to finance, own and profit from their own energy projects.

5. We need more specific goals than just regional targets. The Governor's proposed allocation seems like a good initial estimate. But, the gross regional MW targets are too general to make certain that we meet the social, economic, and environmental justice goals that should be central to this program. We need to do this once, and to do it right. The environmental screening proposed by the CEC to evaluate proposed allocations needs to include screening for equity and economic development in underemployed and underserved areas.

6. Community participation is essential to the success of this program. We would like to see robust community participation in the design and implementation of this program. The CEC and CPUC need to reach out to underserved and underemployed communities to hear their voice and help ensure that local generation happens and is in accord with the real needs of each community. We recommend workshops/hearings in different regions of the state so that you receive diverse feedback from nontraditional stakeholders, and make energy policy accessible and understandable to a broader network of Californians. Energy and electricity are core services that impact every Californian in their everyday life and in their future economic and environmental health. It is essential that more members of the public participate in these pivotal policy conversations.

We have unprecedented opportunities to kick our fossil fuel addiction, eliminate its detrimental health and environmental impacts, and create good local green jobs. For low-income communities of color, distributed generation can help communities build resiliency and mitigate the impacts of climate change. DG can be an engine for economic revitalization and can be a source of equitable development and democratic control. This program can and should be designed to provide thousands of green jobs, billions of dollars of investment, as well as full participation and ownership to communities that need it the most. It is our responsibility to ensure that communities that are hurt first and worst by our state's pollution not only are first to reap the benefits of DG, but that these communities actively participate in the design of this program.

New CBE research proves higher refinery emissions from lower quality oil [Fact sheet]

COMMUNITIES FOR A BETTER ENVIRONMENT

Is this new science?

CBE's research, "Combustion emissions from refining lower quality oil: What is the global warming potential?," was published by the American Chemical Society in the journal *Environmental Science & Technology* on November 30, 2010 (http://pubs.acs.org/doi/abs/10.1021/es1019965). This is the first peer reviewed research to verify the emissions from refining "dirtier" crude oil using data from actual operations at refineries.

Why did CBE do this research?

Oil companies are switching to very different, lower quality crude oil. We need to know what this could do to our environment, our health, and our climate.

What did CBE find?

- The heavier and more contaminated the crude refined, the more fuel refineries burn per barrel processed: Crude quality predicts the amount of combustion emissions from large groups of refineries with crude inputs from diverse sources.
- Crude quality drove a 39% increase in CO_2 emissions across U.S. refining regions and years (1999-2008). West Coast refineries ran the lowest quality crude and emitted the most CO_2 per barrel refined in this period.
- A switch to heavy oil and tar sands—much heavier, dirtier oils—could double or triple refinery emissions. Worldwide, this could increase annual refinery CO_2 emissions by 1.6-3.7 billion tons. That by itself would increase total well-to-wheel petroleum emissions by 14-33%. The total emissions increase from extracting *and* refining heavy and tar sands oils could be even greater.

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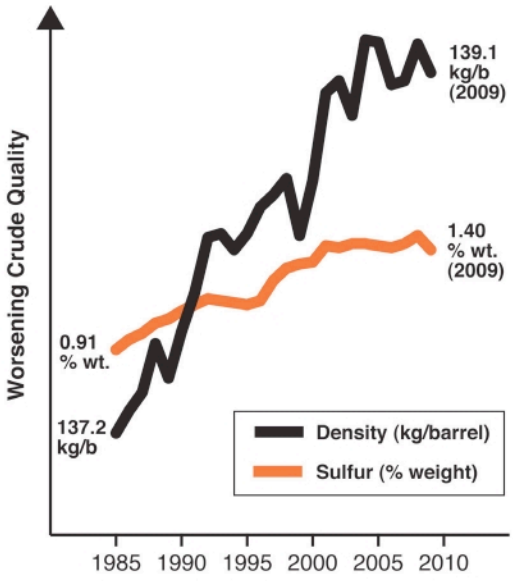

Quality of crude inputs to U.S. refineries reported by USEIA, 1985-2009. Increases in the density ("heaviness") and sulfur content of crude refined over time show that a shift to lower quality oil has already begun. A full-blown switch to the average heavy oil and tar sands bitumen would worsen the quality of crude refined by 8-14 times what is shown in this chart.

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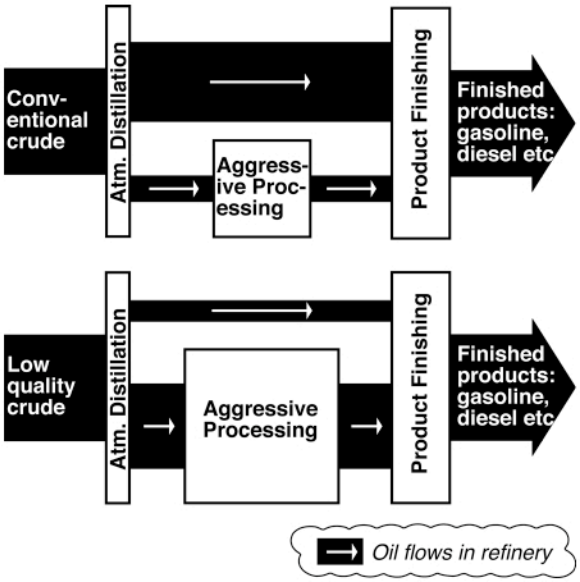
A CBE fact sheet: Emissions from refining lower quality oil—continued

How does this pollution increase?

- Making motor fuels from lower quality crude requires more intensive processing.
- This more intensive processing requires more energy to refine each barrel of crude.
- Burning more fuel for that energy emits more pollutants from refineries.
- CBE measured *how much* these effects of "dirtier" crude increase refinery process intensity, energy intensity, and CO_2 emissions intensity using data from 97% of the U.S. refining industry over ten years.
- We also showed that other factors could not explain these effects from refining dirtier crude.



Aggressive processing (vacuum distillation, cracking, and aggressive hydroprocessing) acts on a larger portion of the total crude refined to make motor fuels from lower quality crude, requiring more fuel to be burned for energy and increasing refinery emissions.

Why is this important?

- Refinery fuel combustion emissions already cause "toxic hot spots" in nearby communities that disparately threaten the health of low income people of color. A switch to dirtier oil could make these toxic fuel combustion emissions even worse.
- Increasing CO_2 emissions from a switch to dirtier oil could make it virtually impossible to avoid worst-case climate impacts. Our best climate science says total emissions from all sources must be cut by 50-80% (see www.ipcc.ch), but oil already accounts for about 40% of these emissions (see www.eia.doe.gov/oiaf/1605/ggrpt).
- Allowing the hugely expensive equipment for dirtier oil to be built could commit us to this additional pollution for decades. See Davis et al., 2010. *Science* (329): 1330-1333.

What is the alternative? Can I help?

We can switch to solar and wind powered electricity to light our homes and run our cars. This would create more jobs than oil (see CBE's *Big Oil, little jobs* fact sheet summarizing U.S. Economic Census data). Stopping the switch to dirtier oil could free up the huge societal investment needed for this "green energy" alternative. We can do it, but it's hard. Replacing limited conventional crude with dirtier oil could make it much, much harder.

Communities such as Richmond, California are making the most progress to stop dirtier oil in order to create this healthier, more prosperous future. CBE works for and with our communities. **We know that we need to work together. We need your help. Join us!**

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