Values for a Robust Distribution Generation Program in California

This document encapsulates the California Environmental Justice Alliance’s values in a strong renewable distributed generation program. Governor Jerry Brown has called for 12,000 MW of renewable power in California. This document summarizes CEJA’s core values and principles that should be prioritized in the design and implementation of the 12,000 MW of RDG.

Who Benefits?

Building 12,000 MW of new Renewable Distributed Generation (RDG) represents an investment of tens of billions of dollars in California’s electric power infrastructure. “Who benefits” from this investment should not be a matter of indifference. Especially in a time of high unemployment and strained social service budgets, investment in communities with the greatest economic and social needs should be an imperative. These low-income populations suffer the most from the current economic crisis, and they also assume the environmental and health burden of the worst air pollution in the state--largely due to combustion of fossil fuels from the highways, factories and power plants that all of us take for granted.

A narrow focus on cost, which looks only at the cents per kilowatt-hour of energy from current small scale renewables, should not be used to marginalize development of renewable distributed generation to benefit communities with low income and people of color. Any cost should be measured against the overall effect on customer bills, which will be quite small due to the fact that the small scale RDG only will supply a few percent of the state’s overall electric power. Furthermore, appropriate policy tools should be applied to reduce the cost of small scale renewable projects, and the cost should always be evaluated in relation to the economic, environmental and social benefits of broad and democratic participation in these programs. See below.

Economic Development and Job Growth, Especially in Communities of Highest Need

As it was part of the Clean Energy Jobs Plan, there is nothing more important than bringing tax dollars and local green jobs into our communities. DG can create different types of jobs – from equipment manufacturers and assembly, professional services, installation and system monitoring.

Low-income communities and communities of color have shouldered the burden of living adjacent to polluting fossil fuel industries for decades and have suffered economically, environmentally and physically as a result. It is critical that we invest in these communities and bring in new clean infrastructure to neighborhoods that are used to seeing assets leave. We need to have trained workers from these low-income communities be part of installing these systems.

We should adopt specific goals and policies to support domestic upstream manufacturing, innovation, education, etc. to local communities, especially underemployed communities.
We want the systems manufactured in-state. There is an estimated 800,000 potential jobs that can be created in manufacturing alone in the US from renewable energy. We need these jobs in communities of highest need.

**Promotes Equitable Participation in the Program**

This would incorporate geographic diversity, but also—most crucially—would consider who participates in and who benefits from the program. The program design should specify installing systems in low-income urban and rural communities. This point is about infrastructure investment and our communities are always left out of these high value investments.

**Design Program to Maximize Benefits and Reduce Cost of Renewable DG**

This should include discussion about how feed-in tariffs and reduced barriers have reduced the cost of small scale solar projects in Germany to less than the cost of large scale solar in California. This changes the focus from the current cost of small scale renewables to how we can proactively design the program to work for everyone and not just a few developers that can jump over the barriers and provide “least cost” RDG.

We should not use the term “least-cost renewable systems”, and instead use “highest value renewable systems”. The former usually implies larger systems that lead to a low price for feed-in tariffs.

We need to address all the barriers regarding cost – including fees, the utilities making it difficult to interconnect, and upgrading the grid. We should look to the German example of investing in grid upgrades and reliable systems that yield high quality power, yet is 40% cheaper than the US.

**Where Should the 12,000 MW of RDG Be Drawn From?**

We need to look at where the 12,000 MW of RDG itself will be drawn from. Gov. Brown is considering the CA Solar Initiative as part of the 12,000 MW, taking up 3,000 MW of the total. The CPUC is including 3,000 MW in other committed programs. If these programs are included, only 6,000 MW would remain. However, there are multiple attempts to claim this remaining 6,000 MW. If all programs are included, the 12,000 MW should be on top of existing programs, and 18,000 MW of RDG should be the real California state goal.

**Simplify Program Participation**

Instead of using the term “Simplicity in Design”, we should use “Simplify Program Participation”. “Simplicity in Design” implies the purpose of making it easier for program designers. This should be refocused to making it easier for program participants. This should include discussion of Universal Access Rights as in Germany, simplifying interconnection, simplifying paperwork, easier contract terms, etc. However, it may also mean adding program features, such as participation of community organizations, designing access to financing, and differentiated prices for various project sizes and technologies.
“Simplicity” or “simplify” should not mean cutting out or compromising on program elements that the EJ community wants to include.

**Creates a Sustainable Market for Renewable DG Projects**

We should avoid the mistakes of other programs. You either under-fund the program relative to the market potential (such as the CA Solar Initiative), or create a program that overstimulates the market (as has happened in Germany, Italy and Spain). We need to figure out a middle ground that can provide a stable market for RDG.

**Provide Sufficient Payments to Stimulate Untapped Market Segments While Controlling Program Cost**

Feed-in tariffs are the best way to ensure a broad participation of different market segments and can provide a tool for controlling program cost if designed well. A feed-in tariff does not provide “market competition” in the price of electric power procurement—it sets the price of renewable contracts by regulation in the same way retail electric utility rates are currently set. Feed-in tariffs refocus “competition” away from bidding for wholesale electricity contract prices, and replace it with using the market power of buyers and program designers to induce an industry competition to reduce the cost of renewables, especially solar PV. The result is that feed-in tariffs often are at or below the viable contract prices in a wholesale market competition for similar renewable energy products.

Small RDG overall is an untapped market. Instead of competition, this point should be about constraining, and where possible reducing, overall program cost. The FIT avoids the competition for power purchase entirely because you set the price by regulation or law. Competition in markets is meaningful if it provides some further social or economic benefit—such as lower prices or better service—it is not a good indicator itself. Competition, for its own sake, should not be a “value” at all, except perhaps in sports.

**Promote a Diversity of Distributed Generation Technologies**

Distributed energy systems include a wide range of resources. There are about six different categories including renewable distributed generation (RDG), combined heat and power, energy storage, energy efficiency, demand controls, and a well designed distribution grid. RDG is just one category in this diverse mix, and there are at least half a dozen diverse renewable distributed generation technologies that can and should be included in this program. We should look at examples such as putting biomethane into fuel cells to provide energy round-the-clock; complementing solar which produces energy during the day. Diversity addresses technical problems with the grid and also reduces cost compared to relying only on solar.

**Use Feed-In Tariff to Address Risk Allocation**

We should avoid imposing additional costs and burdens on small project developers. A feed-in tariff addresses this risk allocation to a great degree, since the primary risk is that utilities and their customers will have to pay for a service that they are not receiving or pay for potential costs associated with the program. A feed-in tariff is based upon the utility (energy buyer) paying the project developer (energy buyer)
seller) a fixed amount of money for electricity produced. This is a built-in protection for the utility (the buyer)—the utility only has to pay for actual electricity generated. Similarly, the current system imposes costs of distribution system upgrades to the project owner/developer.

We should avoid the term “equitably allocates risk”. This is actually a misapplication of the term “equity”. In fact, all costs and most risk are ultimately assumed by the utility customer since rate recovery is guaranteed for regulated utilities. The project developer would be liable only for actual damages to the electric system, and this should be covered by insurance and other methods for reducing risk for both parties of contract.

**The Problem with “Project Viability”**

The issue of “project viability” is a major issue with wholesale competitive markets that rely on tax benefits and “least cost” bidding evaluation. In California this has resulted in the failure of the vast majority of proposed projects. Focus here should be on a) preventing developers from gaming the system, b) insuring that adequate prices are paid, and c) making interconnection and participation easy enough—all so that projects and the overall program can succeed.

**RDG System Reliability**

RDG systems do inherently provide system reliability; solar especially is critical at the peak system demand. Thus, the best support for system reliability is to get RDG built and on line. 97% of proposals fail to get on line and deliver power. We want a FiT to reduce the risk so that these proposals don’t fail. Project failure is not typical of DG where only 10% of these projects drop out. Grid system reliability could be further supported by program design features, such as diversity of generation sources, investment in the distribution grid, energy storage, and other elements of a distributed energy system. We need to make these social investments in order to realize the full benefits of distributed generation.

**Ensure Program is Successful to Maximize Greenhouse Gas Reductions**

Maximizing greenhouse gas reductions alone is important, however, generally all renewable energy will reduce GHGs. We should maximize GHG reductions by making sure the program is successful. We need to ensure we don’t just have rooftop solar. We need to build installations in communities, and not remote areas with line losses.

**Least Negative Environmental Impact and Greatest Environmental Benefits**

This appears only to be a negative; there should also be at least as much consideration to providing environmental and environmental justice benefits. For example, we should avoid the construction of natural gas plants in urban and rural areas.

**Navigating and Balancing the State’s Diverse Values and Priorities**

The state should prioritize communities disproportionately impacted, low-income communities and communities of color. These communities carry the burden of our state’s pollution and have the least
amount of resources to combat climate change. CEJA can provide the state with maps of the California’s most vulnerable communities to identify where we should prioritize.

Install Small Scale Systems

We should create a separate goal within the 12,000 MW for installing small-scale systems (0-3 MW). 2/3 of the 12,000 MW should come from commercial/residential buildings/parking lots/rooftops. This will spur the creation of jobs and investment of resources where the people are located, and bring much-needed investment to rural and urban communities struggling in the economic downturn and state budget crisis. We need to adopt a FIT with different price points based on the size and kind of system.

We should pursue these small-scale systems even if they add cost to the customer. Study after study (including the LA Business Council report on FITs) shows that the increase to a bill would be minimal each month. Further, surveys and the overwhelming defeat of Prop 23 show that people are willing to pay more to invest in a clean energy future with new economic opportunities.