THE NATIONAL BLACK CAUCUS OF STATE LEGISLATORS

Committee on Energy, Transportation, and Environment

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THE NEED TO DEVELOP & IMPLEMENT EQUITABLE **ENERGY** POLICIES

NBCSL
National Black Caucus of State Legislators

ACKNOWLEDGMENTS

NBCSL Policy Committee on Energy, Transportation, & Environment
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MISSION

NBCSL's mission is to develop, conduct, and promote educational, research, and training programs designed to enhance the effectiveness of our members as they consider legislation and issues of public policy which impact, either directly or indirectly, upon "the general welfare" of African American constituents within their respective jurisdictions. Over the past 37 years, NBCSL has grown from 14 members to a body of nearly 675 African-American state legislators. NBCSL's mission is to create more economic, political, and social equality. NBCSL's priority is to implement policies that will protect and benefit all Americans.

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The National Black Caucus of State Legislators (NBCSL) is the nation's largest membership association of African-American state legislators.[1] With nearly 675 members from across the country representing more than 65,000,000 constituents, the primary mission of NBCSL is to educate its members on policies that advance the interests of African Americans, and vulnerable communities more broadly, in the United States. NBCSL's work is sparked by a desire to protect those at a disadvantage by enacting policies that embody core notions of social justice.[2]

Although our efforts are wide-ranging and span many sectors, those impacting essential services, like electricity, deserve urgent attention. Minority policymakers and policymaking bodies like NBCSL have worked for many years to assure universal, affordable, and reliable access to basic energy service. And with many new innovations and technologies coming online, we have great opportunities for our community – so long as policies adhere to the principle of fairness and do not benefit some at the expense of all.

Recent energy developments have led to the significant deployment of distributed generation

1. For more information, please visit http://www.nbcsl.org.
2. Over the years, NBCSL has adopted a number of policy resolutions drawing attention to these types of issues and put forward workable ideas for solving them. These resolutions can be found at http://www.nbcsl.org/public-policy/resolutions.html.

(DG) technologies that allow people to generate their own electricity on site. For those who can afford to invest in DG, they will benefit from lower electric bills and from the knowledge that they are directly supporting a form of cleaner energy. But, because many DG technologies rely on renewable energy to produce electricity, consumers will still want (and need) to be connected to the electric grid. Just think for a moment about the electricity needed to run your home – refrigerator, television, computer, wash machine – after the sun has gone down. If you weren't connected to the electric grid, all of those activities would have to wait until sunrise.

As an overview, energy generation has traditionally been centralized at large plants that burn, for example, coal or natural gas. The electricity generated at these plants is then delivered to consumers' homes via the electric grid – from the power plant, over transmission lines, then into our neighborhoods and eventually to our homes. It is always there at the ready. DG, on the other hand, decentralizes this process. It enables customers to generate electricity on-site by tapping into a variety of energy sources, even renewable sources like the sun. Roof-top solar panels installed on homes are one of the most widely-used DG systems. States have developed a number of policies and incentives to encourage the adoption of DG and have resulted in growing popularity of rooftop solar amongst many consumers.

NBCSL enthusiastically embraces the promise of cleaner and more affordable energy of all kinds, and supports the experimentation and innovation that is driving progress in the DG space. However, the prevailing approach to DG has created a fundamentally inequitable dynamic, which risks creating two separate and unequal classes of electric customers: those who can afford to install and participate in DG programs, and those who cannot. The unfortunate irony is that those who would benefit most immediately and most profoundly from these programs – minorities, low-income households, and those on fixed incomes, who already pay a greater percentage of their income for electricity service – are disproportionally picking up additional costs. The cost savings advertised to customers come in the form of buying less electricity from the utility and via "net metering," which measures any excess electricity produced by the DG system. The savings from buying less electricity is really no different than consumers being more efficient and effective stewards within their homes. The savings via "net metering," however, are a result of the way electric rates were originally designed and essentially provide a reading that does not fully account for the infrastructure used to transport electricity to and from homes with DG.

We are concerned about the regressive nature of the cost-shifting that results from the net metering policies used to make DG appear to be a more attractive financial proposition. The end result is that households not able to afford DG systems are inadvertently left to pay more for the electric grid. These costs will continue to escalate as DG providers continue to market to more affluent households. The last in line will continue to share an increasingly larger financial burden. Electric utilities have an array of statutory and regulatory, non-avoidable, obligations to maintain the electric grid. Under the current policy framework, as the number of DG customers increases, the greater the burden on non-DG customers to support grid maintenance and enhancements.

This paper emphasizes the importance of developing and implementing equitable policies impacting the vital service of electricity through solar distributed generation. Left unaddressed, policymakers risk the creation of an "energy divide" alongside the already established income gap where low and fixed income consumers and large swaths of minority consumers subsidize new distributed generation services for higher-income customers. To assure fairer and more inclusive outcomes, we are concluding this paper with five equitable, forward-looking, and consumer-oriented guiding principles for service, delivery, use, and pricing in the energy sector.

WHY WE NEED TO REMAIN VIGILANT AND CONTINUE WORKING ON BEHALF OF THE MOST VULNERABLE MEMBERS OF OUR COMMUNITIES

The work of organizations like NBCSL to promote equality across every sector of the economy has yielded many gains Yet, much remains to be done, particularly to protect our low-income, minority, and fixed-income communities. These communities are most vulnerable to the consequences of uncertain economic growth in the United States. These communities remain in a constant state of economic precariousness which leaves them vulnerable to sudden market shifts. The impacts of this economic instability on vulnerable populations are acutely evident in the energy utilities space. Minority, low-income households, and those on fixed incomes spend significantly more, as a percentage of their incomes, on electricity than any other group. In particular, those with annual pre-tax incomes below $50,000 devote more than double their share of income to pay for energy than those with incomes over that threshold.[3] Not surprisingly, that share increases sharply as annual income decreases: those earning between $10,000 and $30,000 a year devote about a quarter of their income to electricity, while those earning under $10,000 devote 75 percent. With more than 60 percent of African Americans and Hispanics earning less than $50,000 each year, poor minority communities are especially vulnerable to rising energy costs.[4]

In response to this dilemma, an array of state and federal government entities have developed programs to offset some of these costs. The Low Income Home Energy Assistance Program (LIHEAP) is the flagship federal program developed for these purposes. Administered by the U.S. Department of Health & Human Services (HHS), LIHEAP "helps keep families safe and healthy through initiatives that assist families with energy costs. [HHS] provides federally funded assistance in managing costs associated with home energy bills, energy crises, and weatherization and energy-related minor home repairs." Many states also have their own energy assistance programs.

Unfortunately, funding for these programs, including LIHEAP, has been cut deeply over the last few years. Funding cuts, coupled with rising energy costs, high unemployment, and non-existent wage growth, puts these families in a precarious situation. In its brief on the effects of rising energy costs, American Electric Power stated, "…many American families must make the difficult choice of either heating or eating. In response to this dilemma, many households reported going to such extreme measures as closing off parts of their homes, keeping temperatures at unsafe levels, and even using a kitchen stove as a source of heat."[5] The prospect of higher electric bills could prove disastrous to a large portion of low- and fixed-income consumers, and especially minorities in light of the 20-1 racial wealth gap that leaves them with few resources with which to meet unexpected costs.

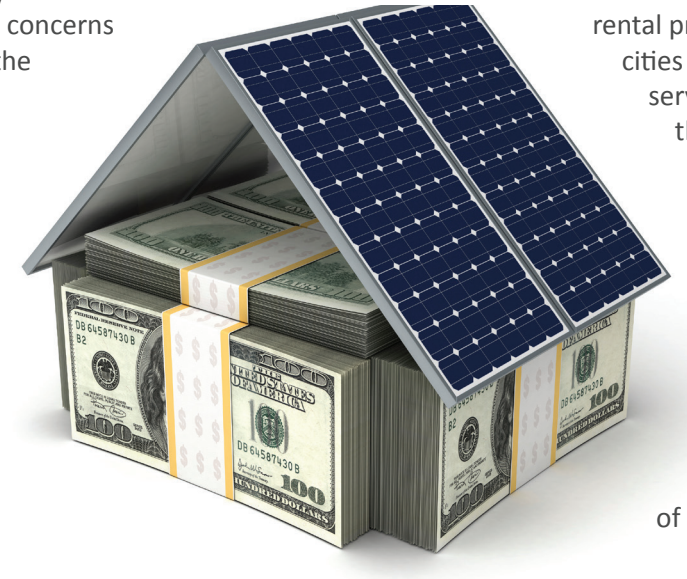
Stronger regulatory oversight and planning is critical to ensure that energy programs like net metering are inclusive, non-regressive, and equitably structured. DG has the ability to help deliver energy services efficiently and affordably

3. American Coalition for Clean Coal Electricity. February 2012. Report found on: http://www.americaspower.org/sites/default/files/Energy_Cost_Impacts_2012_FINAL.pdf
4. American Coalition for Clean Coal Electricity. (February 2012). Report found on: http://www.americaspower.org/sites/default/files/Energy_Cost_Impacts_2012_FINAL.pdf
5. American Electric Power. Brief found on: http://www.aep.com/about/IssuesAndPositions/Financial/docs/risingcostLow-Income.pdf

if it is properly implemented and widely adopted. For low-income, minority and fixed-income communities, initiatives around modernizing the traditional electric rate structure model hold particular promise, especially with regard to lowering rates and empowering these customers with more control over their already unwieldy monthly bill. But without oversight by regulators, the costs of these new services for low-income and minority and fixed-income communities could very well outweigh any benefits. As such, we as policymakers must ensure that innovation in this sector is as inclusive as possible and sustainable for years to come.

THE OPPORTUNITIES AND CHALLENGES ASSOCIATED WITH DISTRIBUTED GENERATION

Distributed generation entails the installation of small-scale generation technologies on customers' premises. Many of these involve the use of renewable energy resources like solar. Customers who can afford to install an array of photovoltaic solar cells on their roof are able to offset their energy use with the electricity generated by these alternative methods. In some cases, they can sell excess energy back to the utility, which could further reduce monthly bills. As such, this approach to modernizing the provision of energy services holds a great deal of promise for low-income, minority and fixed-income consumers who, in theory, would be able to use these new services to greatly decrease energy expenditures. However, the ways in which distributed generation programs have been rolled out across the country has raised serious concerns about the extent to which these benefits are accessible to low-income and minority customers.



For NBCSL, and those we represent, the primary concern stemming from DG programs revolves around how the costs and benefits of this new method are shared among utility customers. In most cases, individual customers are responsible for paying all the costs associated with the purchase and installation of DG systems. Even after taking into account generous tax subsidies for both the production and installation of solar panels, these costs can still be quite high, often leaving them far beyond the reach of low- and fixed-income customers. In addition, there is low awareness of and demand for these types of services among low-income, minority and fixed-income households because these consumers are more likely to live in apartment buildings, rental properties or in densely populated cities that are simply not amenable to DG services. The result is a widening gap in the demographic profile of households who are able to pursue distributed generation opportunities and reap the benefits, and those who are not.

But those with DG on their premises do more than capture all the benefits – t*hey also indirectly raise overall utility costs for non-participants*. This result stems from the current approach of compensating DG participants for

offsetting the electricity they use and occasionally the excess energy they generate and sell back to utilities. This is arrangement is called "net metering," which is defined under federal law as "[s]ervice to an electric consumer under which electric energy generated by that electric consumer from an eligible on-site generating facility and delivered to local distribution facilities may be used to offset electric energy provided by the electric utility to the consumer during the billing period."[6] In short, this refers to the ability of DG customers to offset their electricity use (slow their meter down) and sometimes sell excess energy back to the utility at rates that equal (or nearly equal) to the full retail rate. These customers are using the services of the electric grid, but they are not paying for it. In practice, this shifts many costs to non-DG customers.

Retail rates encompass a range of costs that are above and beyond those that are incurred by customers with DG systems. In particular, the retail rate is typically set to cover costs associated with the generation (e.g., fuel costs), transmission (e.g., line maintenance and construction), and distribution (e.g., maintenance of local above- and below-ground electric networks) of energy services. The traditional structure of the retail rate equitably distributes the many costs associated with electric power in the United States. Put more simply, everyone pays their fair share regardless of demographic profile or geographic location.

However, in the DG context, net metering creates situations where certain customers inadvertently are avoiding paying for the full range of services provided by the grid, leaving a smaller group of customers to pick up the slack. In this way, many DG programs make it possible for participants to avoid paying their fair share for maintaining the electric grid. As current trends make clear, there is a very high likelihood that this shrinking group of customers will be comprised of disproportionately large numbers of low-income, fixed-income, and minority households.

Generous subsidies, tax breaks, and incentive programs were vital to the early success of many DG systems, including solar at a time when equipment and installation costs were high. Such subsidies are no longer justified given current market conditions. Local, state, and federal policies provided – and continue to provide – solar owners and firms with tax credits, grants, and loans in addition to generous net metering policies. These policies were established to stimulate and maturate the solar market by reducing the costs of production, equipment and installations, and to aid consumers in recouping their investment. Solar policies were largely successful in lowering the cost of solar energy. In 1980, the cost of solar hovered near $25 per watt. By 2011, the cost declined to $6.13 per watt. The robust nature of the solar market coupled with the technology's relatively low cost no longer justify such generous subsidizations – especially given the regressive aspects of current policies.

Some states, via their legislatures and public utility commissions, are beginning to reevaluate relevant laws and policies, but many remain unaware of the regressive cost-shifting that is resulting from their net metering and DG policies. In addition, they are being pressured by some interests to maintain existing policies on the theory that rules dating from the infancy of solar power continue to be necessary to incubate their businesses. Many of these same interests currently operate free of the various consumer protection rules, service obligations, and rate-making processes that govern traditional electric utilities. This has given rise to several of the inequalities described above. As such, it is incumbent upon state policymakers, particularly those representing minority, low-income, and fixed-income consumers, to take the lead in forging fairer and more inclusive policies.

6. Pursuant to section 1251 of the federal Energy Policy Act of 2005, the full text of which is available at http://www.gpo.gov/fdsys/pkg/PLAW-109publ58/pdf/PLAW-109publ58.pdf.

UTILITY POLICY GOING FORWARD

The National Black Caucus of State Legislators remains committed to developing polices that advance equality and fairness for all in the utility space. Indeed, NBCSL recently adopted a resolution "urging equitable distribution of electricity grid systems."[7] Our goal in this resolution was to assure fairer and more equitable pricing and ratemaking outcomes in the DG space. The resolution encourages policymakers to do the following:

- Update net metering policies in their states so that solar customers and other distributed generation customers who use the electric grid pay a fair and equitable fee to maintain the grid and to keep it operating reliably at all times;
- Develop policies for solar rooftop customers that distribute system costs equitably by creating mechanisms that recover grid costs from DG systems, enhance cost transparency, and determine if non-solar customers do, in fact, benefit sufficiently from the policy change; and
- Support programs that provide funding or utilize fair and equitable financing models to aid low-income households and communities to become more energy efficient, and to use solar panels or other forms of alternative energy.

As policymakers and regulators address these action steps, we respectfully offer the following five principles to guide their efforts:

1. **Ensure that utility policies reflect core notions of equity and social justice.**
   Policymakers at every level of government should strive to ensure that policies impacting the utility sector will promote equal opportunity and bolster core notions of social justice. Utility services are too essential to risk the development of policy regimes that result in the inequitable provision of electricity. NBCSL's recent resolution on DG, discussed above, offers a useful template for how these new approaches might be structured.

2. **Avoid regressive cost allocation in distributed generation programs.**
   The rate-setting process in the utility space has barely changed over the last few decades. As a result, very little has been done to develop approaches that reflect the technological and economic realities of the modern utility space. Low-income, minority and fixed-income consumers have been negatively impacted by this stagnation: they pay significantly more, as a percentage of their income, than most other demographic groups. Coupled with low levels of participation in DG programs, these groups are likely to remain subject to regressive cost allocations without some kind of policy intervention. Thus, policymakers should seize every opportunity to experiment with new ways of ensuring that cost allocation models do not remain regressive.

3. **New regulatory frameworks should strive to distribute the benefits and costs of innovative new utility services more evenly.**
   Continued deployment of innovative services like DG give us a unique opportunity to revisit rate-making policies. The collision of new services with existing regulatory and rate-making frameworks has resulted in the uneven distribution of the costs and benefits of these services. Even so, there are opportunities to implement revised net metering policies that can ensure low-income customers do not shoulder a disproportionate share of the costs of grid maintenance. Other options include

7. The full text of this resolution is available at http://www.nbcsl.org/public-policy/resolutions/item/1051-energy-transportation-and-environment-resolution-ete-14-32.html.

levying a fee, based on their grid use, to be paid by solar and other DG customers.

4. **Study these issues in more detail and inform new policies with data.**
   Effective regulation in the solar sector requires policymakers and regulators to examine new technologies and evolving business models. These efforts will inevitably yield useful data about the benefits and costs of policies like DG. This information can be used to craft effective policies that support the continued innovation of solar and encourage more widespread access and use by minority, low-income and fixed-income consumers. Policymakers and regulators should conduct a formal study on whether and how to bring solar firms and related DG entities under the same regulatory umbrella as traditional utilities. Data should guide whether formal regulatory oversight of these firms is necessary to achieve informed and impactful policymaking.

5. **Assure robust consumer protections.**
   Consumer protections and increased regulatory oversight must be a key component of future energy legislation. These protections and safeguards are vital to ensuring that every utility customer has equal opportunity to reap the benefits of new services, while also paying their fair share of the costs. Many existing consumer protection standards remain viable in this new era. Policymakers should extend these robust protections to solar customers. To this end, policymakers and regulators should work closely together to ensure core values are reflected in any consumer protection regimes that emerge.

CONCLUSION

The National Black Caucus of State Legislators recognizes renewable energy's potential. Current policies, however, exact an inequitable and unjust cost on minority, low income and fixed income consumers. If left unchecked, current policies like net metering will only increase the burden on these consumers. This outcome is not only unfair, it is unnecessary. We must not allow outdated policies to create a consumer caste system where some can utilize and benefit from solar policies at the expense of our most vulnerable of citizens. We at NBCSL urge our colleagues to reform laws and policies in a manner that reflects the foundational principles set forth above.