



**Testimony of Connecticut Fund for the Environment  
Before the Committee on Energy and Technology**

*In support of*  
**H.B. No. 6023, AN ACT CONCERNING DISTRIBUTED GENERATION**

Submitted by Roger Reynolds  
Legal Director  
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*Connecticut Fund for the Environment (CFE) is a non-profit environmental organization with over 5,500 members statewide. The mission of CFE, and its bi-state program Save the Sound, is to protect and improve the land, air, and water of Connecticut and Long Island Sound. We use legal and scientific expertise and bring people together to achieve results that benefit our environment for current and future generations.*

Dear Senator Doyle, Representative Reed, and members of the Committee on Energy and Technology:

Connecticut Fund for the Environment (CFE) submits this testimony in support of Proposed H.B. No. 6023, An Act Concerning Distributed Generation. This bill would increase deployment of clean distributed generation (DG) energy resources by ensuring that consumers and businesses with clean DG resources are adequately compensated for the value they provide. We strongly support development of a methodology for determining the value clean DG energy resources provide to the grid, ratepayers, and society, and establishment of a clean DG tariff.

**I. Clean distributed generation**

Clean DG refers to renewable and low-emission energy sources, including solar, wind, fuel cells, and combined heat and power. These resources are essential to transition Connecticut away from fossil fuels to a clean energy economy. We need clean DG to help the state meet the goals established in the Comprehensive Energy Strategy and in the Global Warming Solutions Act, which requires the state to reduce our GHG emissions to 80% below 2001 levels by 2050. The state should take action to promote clean DG and ensure that Connecticut residents and businesses are adequately compensated for the value of these clean energy technologies.

Clean DG energy resources provide a wide range of benefits. First, they reduce local air pollution and greenhouse gas emissions, which harm public health and the environment. Second, they are highly efficient. The power generated from clean DG resources is consumed onsite or nearby, so there are low transmission losses (in contrast, electricity generated at a central power plant often must travel long distances to end consumers, resulting in large transmission losses).

Third, clean DG takes pressure off the grid by reducing the need for new generation and new transmission infrastructure. Fourth, clean DG increases grid reliability and durability by adding clean, renewable sources of electricity that are less vulnerable to storm-related impacts. Finally, clean DG creates jobs in the renewable energy sector (*e.g.*, installing solar panels).

*a. Value of clean DG methodology*

While clean DG is necessary to meet Connecticut's clean energy and resiliency goals, it can face obstacles. Utility rate structures and charges have discouraged the growth of clean DG in Connecticut, even though state policies favor the development of clean, renewable sources of energy. In addition to contravening Connecticut energy policy, these utility-imposed burdens are unsupported by the facts. Value of solar studies have shown that solar does not impose costs on the grid and ratepayers; in fact, it provides benefits.<sup>1</sup> This analysis likely applies to other types of clean DG as well, but a comprehensive study is needed.

CFE strongly supports development of a methodology to determine the value clean DG resources provide to ratepayers, the grid, and society. Such a proceeding is needed to ensure that unfair burdens are not imposed on clean DG, which may be undervalued if Connecticut does not fully assess the benefits associated with these clean energy resources. Other states, including Minnesota<sup>2</sup> and North Carolina,<sup>3</sup> have already developed methodologies to determine the value of solar in their jurisdictions, and concluded that the benefits outweigh the costs. As H.B. 6023 proposes, Connecticut should take a comprehensive approach and determine the value of fuel cells, combined heat and power, and other clean DG resources in addition to solar.

The Department of Energy and Environmental Protection (DEEP) should establish a clean DG methodology that, at a minimum, accounts for: (1) the value of electrical energy and its delivery, (2) for combined heat and power, the value of thermal energy and its delivery, (3) value in mitigating market prices for natural gas and electricity, (4) electric generation capacity, (5) electric transmission and distribution capacity, (6) electric transmission and distribution line losses, (7) environmental value, (8) system reliability, and (9) costs to integrate distributed generation into the grid. In addition, DEEP should be permitted to incorporate other values into the methodology, including credit for locally manufactured or assembled energy systems, systems installed at high-value locations on the distribution grid, or any other factors the Department deems relevant.

*b. Value of clean DG tariff*

CFE also supports creation of a mechanism that would allow electric customers with clean DG to recover the value their resources provide. The Public Utilities Regulatory Authority (PURA) should accomplish this by establishing a "value of clean DG tariff." Such a tariff would fully compensate consumers and business with clean DG resources for the value their resources

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<sup>1</sup> See Lena Hansen & Virginia Lacy, Rocky Mtn. Inst., *A Review of Solar PV Benefit & Cost Studies* (2d. ed. Sept. 2013), available at [http://www.rmi.org/Knowledge-Center%2FLibrary%2F2013-13\\_eLabDERCostValue](http://www.rmi.org/Knowledge-Center%2FLibrary%2F2013-13_eLabDERCostValue).

<sup>2</sup> Minn. Dept. of Comm., Div. of Energy Res., *Minnesota Value of Solar: Methodology* (Apr. 1, 2014), available at <http://www.mn.gov/commerce/energy/images/MN-VOS-Methodology-FINAL.pdf>.

<sup>3</sup> R. Thomas Beach & Patrick G. McGuire, Crossborder Energy, *The Benefits and Costs of Solar Generation for Electric Ratepayers in North Carolina* (Oct. 18, 2013), available at [www.energync.org/resource/resmgr/.../NCSEA\\_benefitssolargen.pdf](http://www.energync.org/resource/resmgr/.../NCSEA_benefitssolargen.pdf).

provide to the grid, ratepayers, and society. Minnesota has already developed a “value of solar” tariff,<sup>4</sup> which could be used as a model. CFE proposes that customers with clean DG resources be given the option to receive compensation using either net metering, if available,<sup>5</sup> or the value of clean DG tariff. In other words, the tariff would be offered as an alternative to net metering; it would not replace net metering.

Thank you for your time and consideration in this matter.

Respectfully submitted,

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<sup>4</sup> Minn. Dept. of Comm., Div. of Energy Res., *Minnesota Value of Solar: Methodology* (Apr. 1, 2014), available at <http://www.mn.gov/commerce/energy/images/MN-VOS-Methodology-FINAL.pdf>.

<sup>5</sup> Connecticut authorizes net metering for consumers who generate solar power. Net metering is not currently available for other types of clean DG.