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U.S. SENATE CLIMATE CHANGE TASK FORCE

## United States Senate

Dec 16, 2022

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The Honorable Xavier Becerra  
Secretary  
U.S. Department of Health and Human Services  
200 Independence Avenue, SW  
Washington, DC 20201

Dear Secretary Becerra,

The Biden administration has made a whole-of-government approach to combatting climate change a clear priority, but outdated Centers for Medicare & Medicaid Services (CMS) regulations are preventing health care facilities from transitioning to clean energy infrastructure. The old safety standards on which these regulations rely require fossil fuel-powered backup generators at medical facilities, while the current standards allow for emergency backup power from any energy source—including clean energy.<sup>1</sup> I urge you to use your authority to issue a waiver and expeditiously adopt the current safety standards, which will enable health care centers to take advantage of historic climate investments in the *Inflation Reduction Act*, transition to clean energy infrastructure, and provide care that does not rely on energy sources that undermine public health.

Communities expect hospitals and health care centers to be anchor institutions that provide safe haven in a storm and maintain operational capacity during extreme weather events. This requires a source of uninterrupted electrical power if the local electric grid fails. The National Electrical Code (NEC) therefore requires health care buildings to have two independent power systems, with one power source serving as backup source to the other.<sup>2</sup> As a condition of participating in Medicare and Medicaid programs, CMS, through its adoption of the Life Safety Code (LSC), requires that certain health care facilities<sup>3</sup> adhere to NEC guidance from 2011. The 2011 NEC

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<sup>1</sup> See *NFPA 70: National Electrical Code* 470 (2023).

<sup>2</sup> See *id.*; *NFPA 70: National Electrical Code* 449 (2011).

<sup>3</sup> Health care facilities include hospitals, religious nonmedical health care institutions, ambulatory surgical centers, hospice care, all-inclusive care for the elderly, long-term care facilities, intermediate care facilities for individuals with intellectual disabilities, critical access hospitals, and dialysis facilities. Medicare and Medicaid Programs; Fire Safety Requirements for Certain Health Care Facilities, 81 Fed. Reg. 26872 (May 4, 2016), <https://www.federalregister.gov/documents/2016/09/16/2016->

guidance in turn requires the use of fossil-fuel-based generators (or, in limited circumstances, a battery<sup>4</sup>) as the emergency power source for health care buildings.

Electrical experts have since updated the 2011 NEC guidance—most recently in the 2023 NEC<sup>5</sup>—to permit the use of microgrids and other clean energy systems for emergency power generation at health care facilities. Microgrids—which are “localized grids that can disconnect from the traditional grid to operate autonomously”<sup>6</sup>—can use any energy source, including solar or other clean energy sources, which are safer, more resilient, and can be more reliable than fossil-fueled generators. Because CMS specifies that health care facilities must follow the 2011 NEC guidance, CMS is expressly requiring those facilities to comply with safety recommendations that are now outdated.

Indeed, the fossil-fuel-based-generator requirement undermines both public health and health centers’ ability to respond during a climate disaster. Diesel, which is the main form of fuel that fossil fuel-based generators use, contributes to climate change and harms human health. Diesel exhaust emits pollutants such as soot, nitrogen oxides, carbon monoxide, greenhouse gases and other hazardous air pollutants and toxics, which worsen local air quality and can exacerbate heart and lung conditions for already vulnerable hospital patients.<sup>7</sup> Even during non-emergency times, facilities emit diesel pollution when conducting required monthly tests of their diesel generators.<sup>8</sup>

Access to diesel can be unreliable and prices volatile, especially during extreme weather crises. When Hurricane Fiona wiped out power all across Puerto Rico, diesel supplies were limited, and hospitals received rations ahead of community health centers.<sup>9</sup> Those centers and the people they served fell under constant threat of losing electricity and the services the centers provide. By contrast, all nine community health clinics with solar-powered systems remained operational.<sup>10</sup> Because solar-based microgrids avoid fuel scarcity issues and distribution problems, they are a

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21404/medicare-and-medicaid-programs-emergency-preparedness-requirements-for-medicare-and-medicaid; Medicare and Medicaid Programs; Fire Safety Requirements for Certain Dialysis Facilities, 81 Fed. Reg. 76899 (Nov 4, 2016), <https://www.federalregister.gov/documents/2019/09/30/2019-20736/medicare-and-medicaid-programs-regulatory-provisions-to-promote-program-efficiency-transparency-and>.

<sup>4</sup> See NFPA 70: *National Electrical Code* 624-625 (2011).

<sup>5</sup> NFPA 70: *National Electrical Code* 470 (2023)

<sup>6</sup> The Role of Microgrids in Helping to Advance the Nation’s Energy System, Office of Electricity, U.S. Dep’t of Energy, <https://www.energy.gov/oe/activities/technology-development/grid-modernization-and-smart-grid/role-microgrids-helping>.

<sup>7</sup> Learn About Impacts of Diesel Exhaust and the Diesel Emissions Reduction Act (DERA), <https://www.epa.gov/dera/learn-about-impacts-diesel-exhaust-and-diesel-emissions-reduction-act-dera>.

<sup>8</sup> NFPA 110: *Emergency and Standby Power Systems* 20 (2010).

<sup>9</sup> See Ambar Castillo, *In Fiona-ravaged Puerto Rico, hospitals were prioritized over health clinics for diesel, exacerbating rural health disparities*, Stat News (Oct. 14, 2022), <https://www.statnews.com/2022/10/14/fiona-puerto-rico-health-clinics-hospitals-diesel/>.

<sup>10</sup> Ana Umpierre, *Hurricane Fiona Update: Puerto Rico*, Direct Relief (Nov. 15, 2022), <https://www.directrelief.org/2022/11/hurricane-fiona-update-puerto-rico/>.

more resilient emergency power system than diesel generators during extreme weather, spikes in demand, and any resulting fuel shortages. When climate disasters strike, health care services must be readily accessible to all communities, and resilient electricity infrastructure is a critical component of that access.

Communities and health systems across the United States are already recognizing the need to move to clean energy infrastructure and its advantages. This fall, Boston Medical Center opened a zero-emission 82-bed inpatient behavioral health facility boasting 700 kilowatts of solar capacity to fully power the facility.<sup>11</sup> A hospital in Richmond, California has installed a microgrid system capable of using exclusively renewable energy to power the hospital when the surrounding community has lost electricity for at least three hours.<sup>12</sup> Two environmental justice communities in Massachusetts, Chelsea and Boston's Chinatown, are building community-wide hybrid microgrids to ensure their communities and medical facilities can keep operating when extreme weather strikes.<sup>13</sup>

Unfortunately, however, because the current CMS rules require on-site fossil fuel-based emergency generators, many health facilities that have invested in non-polluting, clean-energy emergency-power systems must still keep large diesel generators onsite and regularly test them, discharging pollutants into the nearby air. As health care facilities prepare for the future, CMS should follow the most up-to-date safety standards, which will to allow and facilitate the transition to greener, more secure energy sources.

Recognizing that renewable energy sources offer stronger financial and operational stability at lower costs than fossil fuels, Congress included historic amounts of climate funding in the *Inflation Reduction Act*—funding that will lower upfront financial barriers and catalyze the transition to cleaner and more resilient energy systems. The *Inflation Reduction Act* provides tax credits for clean energy technologies, including solar, energy storage, microgrid controllers, and other zero-emission electricity generating infrastructure. Many health facilities operate as non-profit entities and are eligible to receive direct payments for this tax credit, helping to offset the upfront investments in clean energy infrastructure.<sup>14</sup> Bonus credits for clean energy microgrids located on Tribal lands and in low-income communities will further invest in and bolster the

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<sup>11</sup> Press Release, Boston Medical Center, Boston Medical Center Announces Opening of New Inpatient Behavioral Health Center in Brockton (Sept. 14, 2022), <https://www.bmc.org/news/boston-medical-center-announces-opening-new-inpatient-behavioral-health-center-brockton>.

<sup>12</sup> David Bliss, *A Novel, Renewable Energy Microgrid for a California Healthcare Facility*, California Energy Commission (Apr. 4, 2019), <https://www.energy.ca.gov/publications/2019/novel-renewable-energy-microgrid-california-healthcare-facility>.

<sup>13</sup> Resilient Urban Neighborhoods + Green Justice Coalition (RUN-GJC), [https://greenjusticecoalition.org/blog/community\\_microgrids-2/](https://greenjusticecoalition.org/blog/community_microgrids-2/).

<sup>14</sup> David Introcaso, *How the Inflation Reduction Act can help decarbonize the health care industry*, Stat News (Sept. 30, 2022), <https://www.statnews.com/2022/09/30/inflation-reduction-act-reduce-health-care-industry-greenhouse-gas-emissions/>.

resilience of frontline communities facing the climate crisis.<sup>15</sup> Unfortunately, without a waiver or a formal update of current CMS regulations, healthcare systems will be prevented from using these resources for a transition to clean energy sources.

As the Secretary of Health and Human Services (HHS), you have the authority to issue categorical waivers of CMS's Conditions of Participation when updated rules would ensure improved or maintained safety.<sup>16</sup> A categorical waiver to allow the LSC to reference the current 2023 NEC instead of the outdated 2011 version would immediately open up the clean energy opportunities in the *Inflation Reduction Act* to health care facilities and benefit patient safety and health.

As hospitals and health care facilities across the country make necessary plans for climate adaptation and resiliency, we urge you to issue this waiver to unlock the benefits of climate action and the full deployment of the *Inflation Reduction Act* for our health care system. More specifically, we request that you publicly communicate categorical waivers of the outdated 2011 NEC and authorize compliance with the electrical safety standards for health care facilities set forth in Article 517 of the 2023 NEC. This will allow hospitals to make the sustainability and resiliency upgrades needed to respond to the climate crisis.

In addition to my request for categorical waivers of the outdated CMS requirements that prohibit renewable-powered microgrids at health care facilities, I respectfully request written responses to the following questions by January 6, 2023:

1. What steps, if any, has HHS or CMS taken to update the Conditions of Participation to adopt the most up-to-date National Electrical Code?
  - a. Does CMS have plans to update its Life Safety Code provisions on energy infrastructure for hospitals and health facilities? If so, what is the timeline for promulgating updated standards? If not, why not?
2. What other CMS Conditions of Participation reference standards that are out of date?
  - a. What effect do outdated codes have on patient health and safety?
  - b. What effect do outdated codes have on hospital resiliency?
3. What barriers, if any, exist to adopting and maintaining up-to-date codes in the CMS Conditions of Participation?
4. What other actions is CMS undertaking to support health care systems and providers as they adapt to climate change?

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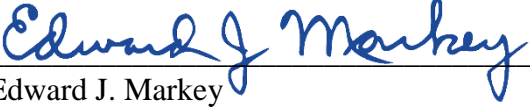
<sup>15</sup> See Lindsay Sobers & Kenneth C. Wang, *Inflation Reduction Act expands tax credits for energy projects*, Reuters (Sept. 15, 2022), <https://www.reuters.com/legal/legalindustry/inflation-reduction-act-expands-tax-credits-energy-projects-2022-09-15/>.

<sup>16</sup> See Medicare and Medicaid Programs; Fire Safety Requirements for Certain Health Care Facilities, 81 Fed. Reg. 26872 (May 4, 2016) (providing for waiver related to fire safety codes when compliance with updated rules "provided equally effective means of ensuring safety").

Human-caused climate change continues to make extreme weather events more frequent and more severe. Over the past decade, ninety percent of all counties in the United States have experienced an extreme weather disaster, causing more than \$1.1 trillion in damages.<sup>17</sup> Our climate and health are inextricably linked. As climate change worsens, our health care systems will increasingly feel the weight, whether through disaster response, treating the health consequences of trauma, or a rise in climate-related health conditions, including asthma, overheating, or the spread of infectious disease. In order to protect our health and respond to our climate crisis, we must support the adaptation of our health systems to the realities of climate change. Moving our health care facilities away from reliance on fossil fuels is an important part of that process.

Thank you in advance for your response to these questions and to this request. I appreciate your efforts to enable a more resilient and climate-friendly health care system and your consideration of this matter. If you have any questions, please reach out to Lucy Hu on Senator Markey's staff at [Lucy\\_Hu@markey.senate.gov](mailto:Lucy_Hu@markey.senate.gov).

Sincerely,

  
Edward J. Markey  
United States Senator

cc:

The Honorable Chiquita Brooks-LaSure  
The Honorable Rachel L. Levine, M.D.

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<sup>17</sup> Jake Bittle, *9 in 10 US counties have experienced a climate disaster in the last decade*, Grist (Nov. 16, 2022), <https://grist.org/extreme-weather/ninety-percent-counties-weather-climate-disaster-atlas-fema/>; National Centers for Environmental Information, *Billion-Dollar Weather and Climate Disasters: Summary Stats*, National Oceanic and Atmospheric Administration (Oct. 11, 2022), <https://www.ncei.noaa.gov/access/billions/summary-stats/US/2012-2022>.