

Summary of the Storage Technology for Renewable and Green Energy Act of 2013, or the “STORAGE 2013 Act”

The STORAGE Act of 2013 promotes the deployment of energy storage technologies, enabling the extremely valuable contributions they can provide to the U.S. electric grid. Storage transforms variable renewables like wind and solar into firm power, and it can lower costs for consumers by reducing the need for high-cost peaking electricity. Various technologies can also provide services to the grid, increasing the reliability and safety of the national electrical system. By leveling the playing field of energy tax incentives, the STORAGE Act will bring more of these storage technologies online.

The STORAGE 2013 Act is substantially similar to the STORAGE Act of 2011. It offers investment tax credits for three categories of energy storage facilities that temporarily store energy for delivery or use at a later time. The bill is technology neutral and does not pick storage technology “winners” and “losers” either in terms of the storage technology that is used or in terms of the source of the energy that is stored. The electricity can come from wind, coal or nuclear. Pumped hydro, compressed air, batteries, flywheels, and thermal storage are all eligible technologies as are smart-grid enabled plug-in electric vehicles.

First, the STORAGE 2013 Act provides a 20 percent investment tax credit of up to \$40 million per project for storage systems connected to the electric grid and distribution system. A total of \$1.5 billion in these investment credits are available for these grid connected systems.

Second, the Act provides a 30 percent investment tax credit of up to \$1 million per project to businesses for on-site storage, such as an ice-storage facility in an office building, where ice is made at night using low-cost, off-peak power and then used to help air-condition the building during the day while reducing peak demand. This is a 30 percent credit so the cost of the actual projects that would get the full credit amount would be around \$3.3 million.

One change from last year’s version of the bill is that the minimum size for storage systems to be eligible for this credit is now 5 kWh, whereas it was 20 kWh before. 20 kWh is a reasonable size for industrial energy consumers and big-box stores, but a 5 kWh limit is a size that makes sense for small businesses. This change will allow small businesses to participate in pioneering storage on the grid, and will incentivize storage companies to create leasing models for residential users. Leasing models are proving very successful at increasing grid-connected residential solar, and this credit will open up a whole new market for storage to follow suit.

But if homeowners want to install storage on their own, they will be able to. The Act also provides for 30 percent tax credit for homeowners for on-site storage projects to store off-peak electricity from solar panels or from the grid for later use during peak hours.

Energy storage systems are a unique and valuable resource for our electric grid. They enable renewables, increase grid efficiency, and can even obviate the need for new transmission lines. Establishing tax credits for storage like those already available for technologies like solar power and fuel cells will help usher a national transformation to a smarter, more reliable, and more cleanly-powered grid.