

June 21, 2019

The Honorable John Thune  
U.S. Senate Committee on Finance  
511 Dirksen Senate Office Building  
Washington, D.C. 20510

The Honorable Debbie Stabenow  
U.S. Senate Committee on Finance  
731 Hart Senate Office Building  
Washington, D.C. 20510

**RE: Comments to the Energy Tax Policy Task Force of the Senate Finance Committee**

Dear Senator Thune and Senator Stabenow,

As the Senate Finance Committee reviews energy provisions in the Internal Revenue Code, we strongly recommend that any current or future energy investment tax credits include standalone energy storage as an eligible technology. There is bipartisan, bicameral support for this common-sense measure, as exemplified in the *Energy Storage Tax Incentive and Deployment Act* (S. 1142 & H.R. 2096), which would ensure a level playing field for energy storage with all other energy resources eligible for the ITC. We respectfully request the opportunity to share our views with you in an in-person meeting.

*Who is the Energy Storage Association (ESA)?*

ESA is the national trade association working toward a more resilient, efficient, sustainable and affordable electricity grid enabled by energy storage technologies. With more than 170 member companies, ESA represents a diverse group of power sector stakeholders, including independent power producers, electric utilities, energy service companies, financiers, insurers, law firms, installers, manufacturers, component suppliers and integrators involved in deploying energy storage systems, both nationwide and around the globe.

*What is energy storage?*

Energy storage systems are critical to modernization of the electric grid and help any generation resource connected to the grid – coal, gas, nuclear, wind, solar, hydro – become more efficient, productive, and competitive. Energy storage is increasingly being deployed as backup power for buildings and in the electric grid, helping businesses and the grid become more resilient to hurricanes and other disasters. Moreover, energy storage is integrating much higher levels of renewable energy and enabling the power grid to adapt to increasing electrification of the transportation sector.

Whether working in batteries, pumped hydro storage, electric thermal storage, mechanical storage, power-to-gas storage, or other technologies, companies in the U.S. energy storage industry employ over 70,000 people,<sup>1</sup> with significant room to grow. Moreover, a variety of next-generation storage technologies are in development, with a variety of entrepreneurs and

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<sup>1</sup> See NASEO & EFI, *2019 U.S. Energy and Employment Report*, available at <https://www.usenergyjobs.org/>

small- and medium-sized companies seeking to enter markets for storage in coming years.

Energy storage systems have been identified by Administration officials as a game-changing new tool for a more resilient electric system. The critical importance of energy storage has been emphasized by Secretary of Energy Rick Perry,<sup>2</sup> as well as by Federal Energy Regulatory Commission Chairman Neil Chatterjee.<sup>3</sup> Members of Congress have reached the same conclusion, including Chairman Lisa Murkowski in hearings of the Senate Energy and Natural Resources Committee,<sup>4</sup> as did members of the Energy Subcommittee of the House Energy & Commerce Committee.<sup>5</sup> The National Governors Association also has touted the economic and security gains achieved by increased use of battery energy storage systems.<sup>6</sup>

The Department of Energy has identified electric grid resilience as a priority,<sup>7</sup> with officials citing energy storage as the newest tool for electric utilities and their customers to achieve greater energy security and resilience.<sup>8</sup> Not only is storage directly installed on the U.S. electric

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<sup>2</sup> “The holy grail of energy ... is about battery storage. Battery storage changes the world, I would suggest, the same way that hydraulic fracturing and directional drilling has changed the world.” See “US DOE's Perry sees storage as potential 'Holy Grail', sings fossil fuels' praises,” *Platts*, 2 Nov 2017, available at <https://www.platts.com/latest-news/electric-power/washington/us-does-perry-sees-storage-as-potential-holy-21437709>

<sup>3</sup> “I believe in the potential of storage to be a transformative technology for our grid. Storage is a game changer. I see exciting potential to lower costs and enhance reliability for customers.” See “Heinrich, Chatterjee, Speakes-Backman discuss future of energy storage,” *Daily Energy Insider*, 28 Feb 2019, available at <https://dailyenergyinsider.com/news/17905-heinrich-chatterjee-speakes-backman-discuss-future-of-energy-storage/>

<sup>4</sup> “Energy storage resources present a win-win opportunity to make the grid cleaner, more resilient, and more affordable. By storing power when it is cheapest and dispatching it during peak demand periods when power is most expensive, energy storage can significantly lower consumers’ power bills. It can also help avoid or defer the need to build out additional electric generation, transmission, and distribution infrastructure.” See U.S. Senate Energy & Natural Resource Committee hearing, “Full Committee Hearing to Examine Expanded Deployment of Grid-Scale Energy Storage,” 4 June 2019, available at <https://www.energy.senate.gov/public/index.cfm/hearings-and-business-meetings?ID=83B728AC-6708-40D6-9B96-CC007F5B5906>

<sup>5</sup> See hearing materials transcript of U.S. House of Representatives Energy & Commerce Committee hearing, “Powering America: The Role of Energy Storage in the Nation’s Electricity System,” 18 July 2018, available at <https://energycommerce.house.gov/hearings/powering-america-the-role-of-energy-storage-in-the-nations-electricity-system/>

<sup>6</sup> National Governors Association, *State Strategies for Advancing the Use of Energy Storage*, October 2016, available at <https://www.nga.org/files/live/sites/NGA/files/pdf/2016/1610StateStrategiesEnergyStorage.pdf>

<sup>7</sup> See Department of Energy, “Staff Report to the Secretary on Electricity Markets and Reliability,” Aug 2017, available at <https://www.energy.gov/downloads/download-staff-report-secretary-electricity-markets-and-reliability>.

<sup>8</sup> “You've heard the secretary [Rick Perry] reference storage as the ‘holy grail,’ and we believe that. It’s about having storage capability during times of emergency, during times of crisis, even during normal course of business when you are running peak load. It’s really just to provide another tool in the toolbox that improves our capacity as

grid and integrated into power plants, but also sited at critical infrastructure, Department of Defense installations, industrial facilities, and commercial & residential buildings to ensure greater resilience to electric service disruptions—an issue of particular concern as more and more businesses rely on electricity and computerized systems to function.

### *Why establish a tax credit for energy storage?*

According to IRS guidance, energy storage only qualifies for the Section 48 and 25D ITC when integrated with ITC-eligible resources such as solar power under a narrow set of conditions and subject to recapture risks. Without clear statutory rules, these conditions create tremendous uncertainty for investors about the eligibility of energy storage equipment in various operations with ITC-eligible resources. Additionally, energy storage equipment provides the same services whether or not it is integrated with ITC-eligible resources, although ITC eligibility for standalone systems is not clear. As a result, deployments of energy storage are inefficiently limited to specific locations and technical configurations, constrained from optimal use for the electric system.

For those reasons, a broad range of stakeholders support an ITC that allows storage to qualify as a standalone technology (please see the letter attached to this submission). The bipartisan, bicameral *Energy Storage Tax Incentive and Deployment Act* (S. 1142 & H.R. 2096) would accomplish this under the existing energy tax framework. Additionally, there is also bipartisan, bicameral agreement that inclusion of a tax credit for energy storage is warranted in a longer-term, non-expiring energy tax framework. Examples include the *Financing Our Energy Future Act* (S. 1841); the *Clean Energy for America Act* (S. 1288); and the *Energy Sector Innovation Credit Act* (H.R. 7196 (115<sup>th</sup>)).

ITC eligibility for storage as a standalone asset will accelerate its deployment where most needed in the electric system. By untying storage from specific generation sources and configurations, a clear ITC for standalone storage will drive utilization of storage for its most valuable services and locations. This is particularly true for critical uses of energy storage that are not easily compensated via markets, such as grid infrastructure enhancement, disaster preparedness, and resilience. Additionally, ITC eligibility for storage will ensure all other generation technologies, not just solar power, can benefit equally from integrating it into their systems.

Clear ITC eligibility for storage would allow a diversity of U.S. companies to better obtain financing, scale, create jobs, and become more competitive internationally in the fast-growing global storage market. Clarification of the ITC for energy storage would provide greater certainty to investors and businesses, who can then design projects and operate assets without tax code ambiguity and potential for recapture. All storage technologies—batteries, pumped

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an industry to operate during blue sky days and black sky days.” See “Trump administration: Energy storage boosts renewables, national security,” *Washington Examiner*, 12 June 2019, available at <https://www.washingtonexaminer.com/policy/energy/daily-on-energy-trump-administration-sees-energy-storage-as-a-national-security-tool>

hydro, compressed air, thermal, and others—would be eligible for the ITC, ensuring technology neutrality so companies can choose the optimal solution to meet their needs.

Additionally, with many other energy technologies availing an ITC, allowing energy storage access to an ITC is critical to ensure a level playing field across all energy technologies. Given policymakers' recognition of the transformative impact of energy storage on the electric system, its exclusion from energy tax credits as a standalone asset is a significant oversight that will unduly bias against energy storage for power system efficiency, reliability, and resilience.

We encourage you to support capital formation, investment, and jobs in making America's power system more reliable, resilient, and cost-effective with energy storage. We ask you to include standalone energy storage in the ITC and would welcome the opportunity to meet with you and other members of the Task Force to share our perspective in person on including energy storage in an energy tax framework.

Sincerely,



Jason Burwen  
Vice President of Policy  
Energy Storage Association

CC: Senator Pat Roberts (R-KS)  
Senator John Cornyn (R-TX)  
Senator Bill Cassidy (R-LA)  
Senator Thomas Carper (D-DE)  
Senator Maggie Hassan (D-NH)  
Senator Sheldon Whitehouse (D-RI)



April 15, 2019

The Honorable Mitch McConnell  
Majority Leader  
U.S. Senate

The Honorable Chuck Schumer  
Minority Leader  
U.S. Senate

The Honorable Chuck Grassley  
Chairman, Committee on Finance  
U.S. Senate

The Honorable Ron Wyden  
Ranking Member, Committee on Finance  
U.S. Senate

Dear Leader McConnell, Leader Schumer, Chair Grassley, and Ranking Member Wyden,

As you and your colleagues consider energy tax extenders legislation, we urge you to include the bipartisan *Energy Storage Tax Incentive and Deployment Act* (S. 1142), which would ensure a level playing field for energy storage as a standalone asset to compete with all other energy resources made eligible for Section 48 & 25D investment tax credits (“ITC”).

S. 1142 would resolve the uncertainty facing companies who seek to utilize the ITC for energy storage, spurring greater investment and creating jobs while extending the benefits of energy storage deployment among a wider diversity of technologies and industries. Those deployments in turn will accelerate the transition to clean energy and position the U.S. as a global leader in energy storage technology.

We encourage you to support U.S. companies’ investment and jobs in making America’s power system more resilient, efficient, sustainable and affordable with energy storage. As you and your colleagues consider energy tax extenders legislation, inclusion of ITC eligibility for energy storage is among the nearest-term opportunities to advance clean energy in this Congress.

Sincerely,

Advanced Energy Economy (AEE)  
American Council on Renewable Energy (ACORE)  
American Wind Energy Association (AWEA)  
ClearPath Action  
Citizens for Responsible Energy Solutions (CRES)  
Energy Storage Association (ESA)  
National Electrical Manufacturers Association (NEMA)  
National Hydropower Association (NHA)  
Solar Energy Industries Association (SEIA)  
Sheet Metal and AC Contractors National Association (SMACNA)  
California Energy Storage Alliance (CESA)  
New York Battery and Energy Storage Technology Consortium (NY-BEST)

**Energy Storage Tax Incentive and Deployment Act of 2019**  
**Senators Heinrich and Gardner (S. 1142) / Representatives Doyle, Buchanan, and Blumenauer (H.R. 2096)**

Summary

- Under current law, energy storage only qualifies for the investment tax credit (ITC) when integrated with ITC-eligible solar resources under a narrow set of conditions and subject to recapture risks, creating tremendous uncertainty for investors.
- S. 1142 / H.R. 2096 modifies the existing ITC for numerous energy technologies to clarify eligibility of energy storage technologies (e.g., grid batteries, pumped hydro, etc.)

Background

- Energy storage technologies—grid batteries, pumped hydropower, compressed air, thermal storage, etc.—are uniquely flexible resources that modernize the electric system to be more efficient, resilient, and adaptable to any mix of electric supply resources. Over 70,000 people are employed in the U.S. energy storage industry.
- Numerous energy technologies—fuel cells, solar power, microturbines, combined heat and power, etc.—can access the ITC. Some of these technologies are competitors to energy storage. The narrow application of energy storage allowed by IRS rules prevents non-ITC-eligible resources (such as wind and natural gas) from deriving the same investment benefit as solar power.
- Clarifying eligibility of the ITC for energy storage will create a level playing field across electric grid technologies, improve business certainty, and allow energy storage to pair with any type of generation asset. Doing so will enhance grid efficiency and resilience while creating more jobs and capital formation.

Bill Details

**Business Energy Investment Credit for Energy Storage (Sec. 48)**

For commercial applications, the bill makes energy storage eligible for the tax incentive in section 48 of the IRS code. All energy storage technologies would qualify, including batteries, flywheels, pumped hydro, thermal storage, compressed air, etc. To qualify for the ITC, the system must have a storage capacity of at least 5 kilowatt-hours. The credit allowed is the same as currently available for fuel cells, solar energy, microturbines, combined heat and power, and geothermal heat pumps, including the phase down as shown in the table below. The IRS currently allows an ITC for energy storage when it is installed in conjunction with a solar energy system under specific conditions, although these conditions restrict storage operations and present recapture risks. The bill would extend the ITC for any energy storage project in all applications, including consumer-owned, grid-connected, or off-grid, as well as paired with any generating resources, such as gas or wind. As shown in the table below, the Section 48 ITC phases down and then remains at a lower level from the beginning of 2022.

**Residential Energy Property Tax Credit for Energy Storage (Sec. 25D)**

For residential applications, the bill provides homeowners the same credit as currently available for solar energy in section 25D. Only battery storage is eligible for the residential ITC, and the system must have a storage capacity of at least 3 kilowatt-hours. As shown in the table below, the Section 25D ITC phases out fully at the beginning of 2022.

**ITC Phase Out Schedule**

Application	Tax-Year Ending				Subsequent tax years
	12/31/19	12/31/20	12/31/21	12/31/22	
Business Investment Energy Storage Section 48	30%	26%	22%	10%	10%
Homeowner Residential Battery Storage Section 25D	30%	26%	22%	n/a	n/a

**Joint Committee on Taxation Score**

In the 115<sup>th</sup> Congress, JCT estimated that storage eligibility for the ITC would create a tax expenditure of ~\$300MM over 10 years.

Item	Not a factor in current bill		Fiscal Years [Millions of Dollars]				
	2018	2019	2020	2021	2022	2018-22	2018-27
Section 48.....	-12	-30	-40	-43	-35	-160	-259
Section 25D.....	-1	-5	-10	-13	-13	-42	-51