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Energy Vault, Inc
4360 Park Terrace Drive, Suite 100
Westlake Village, CA 91361
United States

November 4, 2022

Internal Revenue Service,
CC:PA:LPD:PR (Notice 2022-47, 49 and 51),
Room 5203,
P.O. Box 7604, Ben Franklin Station,
Washington, DC 20044

Re: Notices 2022-47, 2022-49, and 2022-51

Energy Vault is a US-based energy storage solution provider with proprietary technologies and we appreciate this opportunity from the Treasury and Internal Revenue Service to provide comments to Notices 2022-47, 2022-49, and 2022-51 on the Inflation Reduction Act (IRA) of 2022.

Our comments are primarily motivated to best serve our customers – electric utilities, renewable project developers, and independent power producers – with US-made products, while at the same time supporting them to comply with the requirements of IRA. We are technology agnostic and our current solution portfolio includes gravity-based long duration storage, lithium-ion based short duration storage, and hydrogen, which gives a broader perspective in terms of evolving grid-scale storage landscape.

We will be glad to elaborate our comments and take any feedback, if they is a need.

Regards,
Abhishek

Abhishek Jaiswal, PhD
Director, Product Management

+1 240 264 9653
abhishek.jaiswal@energyvault.com
4360 Park Terrace Drive, Suite 100, Westlake Village, CA 91361, USA
www.energyvault.com

SEC. 45X. ADVANCED MANUFACTURING PRODUCTION CREDIT.

We have the following interpretations on Sec. 45X related to 45X(b)(1)(K), 45X(b)(1)(L), 45X(c)(5)(B)(ii), and 45X(c)(5)(B)(iii) and will appreciate your clarification and guidance -

1. A battery cell manufactured in a US plant is an “eligible component” in a case where raw-materials, components, and equipment used in the manufacturing of the battery cell are of US or foreign origin. Similarly, a battery module manufactured in a US plant is an “eligible component” in a case where raw-materials, components, and equipment used in the manufacturing of the battery module are of the US or foreign origin.

   Explanation: As the current supply chain for battery manufacturing is largely based outside of the US, it will be impractical for US manufacturers to source all materials, components, and equipment that are of only US-origin to qualify for the advanced manufacturing credit. In case the IRA does not allow eligibility at least in the short term (e.g., 36 months), it may fail to develop the domestic battery industry and may create market distortion creating unfair advantage for only a small number of players.

2. Battery cells and battery modules manufactured in a US plant are “eligible component(s)” in a case where these battery cells and battery modules are exported outside of the US.

   Explanation: Export of battery cells and battery modules reinforces the goals of IRA as it will create more business and further development of the domestic battery industry.

SEC. 45Y. CLEAN ELECTRICITY PRODUCTION CREDIT

We will appreciate your clarification and guidance on Sec. 45Y related to 45Y(g)(11), specifically related to the definition of “manufactured product” and estimation of “adjusted percentage” of “domestic content”, as these are open to multiple interpretations and methodologies, respectively.

For “domestic content” estimation, we found precedence in the US automotive industry (49 CFR § 583.6) and our suggestion is that a similar methodology can be used to determine eligibility and compliance with the “domestic content bonus credit” for clean electricity production credit.

Automotive supply chain, like the battery supply chain, is long and complex with parts sourced from Tier- 1, 2, and 3 suppliers located around the world. Calculation of the domestic content in US-made automobiles is regulated by American Automotive Labeling Act (AALA) using 49 CFR § 583.6 - Procedure for determining U.S./Canadian parts content.

SEC. 48(c). ENERGY CREDIT – DEFINITIONS – ENERGY STORAGE TECHNOLOGY

We will appreciate your clarification and guidance on Sec. 48(c) related to 48(c)(6)(B), specifically in reference to the definition of “modification of certain property”.

Some battery technologies degrade over the project lifetime and require capacity addition (referred to in the industry as augmentation) by adding new battery modules to the energy property. Augmentation, in principle, is modification of the property; however, the cost accounting can be done in two ways. The first way is to account for future augmentation cost upfront at the start of the project based on expected degradation throughout the project lifetime. The second way is to account for the cost of augmentation as it is carried out on the project. Please clarify whether either or both ways for treatment of augmentation is eligible as “modification of certain property”.

Additionally, some battery and non-battery technologies degrade over the project lifetime and require replacement of essential elements like flow battery stacks, thermo-photovoltaic cells, trolley systems, or motors to maintain their rated power and/or energy storage capacities. The project accounting of these costs can also be performed in either of the two ways. The first way is to account for future replacement cost upfront at the start of the project based on expected degradation throughout the project lifetime. The second way is to account for the cost of replacement as it is carried out on the project. Please clarify whether either or both ways for treatment of replacement is eligible as “modification of certain property”.