



Submitted electronically via email to Notice.Comments@irs.counsel.treas.gov

February 11, 2016

Internal Revenue Service
CC:PA:LPD:PR (Notice 2015-70)
Room 5203
P.O. Box 7604
Ben Franklin Station
Washington, DC 20044

RE: Comments in Response to Internal Revenue Service Notice 2015-70
Request for Comments on Definitions of Section 48 Property
<https://www.irs.gov/pub/irs-drop/n-15-70.pdf>

Dear Internal Revenue Service:

As a non-profit organization that works closely with clean energy developers and policymakers across the United States, Clean Energy Group (CEG) welcomes the opportunity to respond to IRS's request for comments in Notice 2105-70 on definitions of Section 48 property.

Clean Energy Group is a leading national, nonprofit advocacy organization working on innovative policy, technology, and finance programs in the areas of clean energy and climate change. CEG's Resilient Power Project has been working over the past two years to accelerate market development of clean energy resources paired with battery storage technologies for resilient power applications that serve low-income communities and vulnerable populations during disasters and power disruptions, and to address climate adaptation and mitigation goals through expansion of reliable renewable energy deployment.¹

Clean Energy Group manages the Clean Energy State Alliance (CESA), a sister non-profit organization that works to advise and assist leading state clean energy programs across the country. With CEG, CESA coordinates the Energy Storage Technology Advancement Partnership (ESTAP).² Through ESTAP, CESA staff engages with state energy offices to develop joint federal/state energy storage demonstration projects and to provide technical assistance with support from the U.S. Department of Energy Office of Electricity and Sandia National Laboratories.

¹ See www.cleanegroup.org/ceg-projects/resilient-power-project.

² See www.cesa.org/projects/energy-storage-technology-advancement-partnership. The views expressed in this comment letter are solely those of Clean Energy Group. They do not represent the views of CESA's members or its ESTAP partners.

Issues related to the application of the federal investment tax credit under Section 48 of the U.S. tax code for solar-related energy storage deployments have a profound impact on our work with state solar and energy storage programs and the future of the solar industry.

These comments specifically target Notice 2105-70 topics (1) and (2):

(1) Whether only property that actually produces electricity may be considered energy property or whether property such as storage devices and power conditioning equipment may also be considered energy property.

(2) Whether dual-use property should qualify for the credit and, if so, under what circumstances it should qualify. If it should qualify, what portion of the basis of dual use property should be taken into account in computing the energy percentage.

Existing Treasury regulations treat energy storage devices as qualifying “solar energy property” for the purposes of Section 48 investment tax credit eligibility. Treasury Regulation § 1.48-9(d) provides that qualifying “energy property” includes “solar energy property” for the purposes of Section 48. Section 1.48-9(d)(3) states that “[s]olar energy property includes equipment that uses solar energy to generate electricity, and includes storage devices...and parts related to the functioning of those items.” Based on the plain language and of § 1.48-9(d) and private letter rulings applying the provision,³ energy storage devices, including battery systems and associated hardware, integrated with solar energy systems have been considered Section 48-eligible equipment as a threshold matter.

Clean Energy Group urges the Internal Revenue Service to continue to classify batteries and other types of energy storage systems integrated with solar energy systems as Section 48-eligible equipment, and to affirmatively codify certain current principles, derived from applications of § 1.48-9(d)(3), in new Section 48 regulations. In particular, we encourage the Internal Revenue Service to clarify:

- That all forms of energy storage, including batteries, thermal storage, flywheels, and associated hardware, when incorporated with a solar energy system, can be eligible for the Section 48 investment tax credit.
- That each qualifying part of an integrated energy storage and solar energy system can be eligible for the Section 48 investment tax credit even if multiple businesses have ownership interests in the system.
- That energy storage devices retrofitted into an already installed solar energy system can be eligible for the Section 48 investment tax credit.

³ See, e.g., PLR 201444025 issued May 5, 2014, and PLR 201308005 issued November 20, 2012, ruling that particular electricity storage devices and associated hardware were eligible for the tax credit as integral parts of a solar energy system. PLR 201308005 ruled that a particular energy storage device that could be charged by sources other than the associated solar system is considered a dual use equipment under § 1.48-9(d)(6) and is eligible for the Section 48 investment tax credit as “energy property.”

- That an energy storage system incorporated with a solar energy system can be eligible for the Section 48 investment tax credit even if the storage device uses a separate inverter.
- That the “75 percent cliff” rule be reevaluated and better rationalized as applied to dual use energy storage equipment.

I. The IRS Should Affirmatively Codify How Energy Storage Devices Incorporated With Solar Energy Systems Qualify For The Investment Tax Credit Under Section 48.

Clean Energy Group encourages the Internal Revenue Service to issue new regulations under Section 48 affirming that all types of energy storage devices incorporated with solar energy systems can be eligible for the Section 48 investment. In any new Section 48 regulations, we urge the Internal Revenue Service to take into account the historical technological developments and to explicitly clarify the circumstances in which energy storage technology as part of a solar energy system qualifies for the Section 48 investment tax credit.

At a minimum, CEG urges the Internal Revenue Service to continue its treatment of energy storage devices as qualifying solar energy property under Section 48. Reclassifying the tax credit eligibility of energy storage devices under Section 48 would detrimentally alter the expectations of taxpayers who have relied on the plain language of Treasury Regulation § 1.48-9(d) and a history of private letter rulings applying the provision in developing their projects.

Moreover, re-classifying energy storage devices under Section 48 could put the treatment of energy storage devices installed in the commercial context at odds with the treatment of this kind of equipment in the residential context where Section 25D of the U.S. tax codes applies.

Although the tax code provisions under Section 48 and Section 25D are distinct, it is only sensible to have similar tax credit treatment of energy storage devices under both Section 48 and Section 25D. CEG encourages the Internal Revenue Service to look to Section 25D and its applications in drafting new regulations related to energy storage devices under Section 48 to ensure some congruency between the rules interpreting the two provisions.

From a policy perspective, storage devices should be considered solar energy property for the purposes of the investment tax credit under Section 48 because of all of the added system and grid benefits these devices provide when incorporated into solar energy systems. Storage devices incorporated into solar energy systems offer important benefits that go well beyond the taxpayer. Storage devices can expand solar systems use, with all of the key economic and environmental benefits such systems offer, by providing unique value opportunities for solar systems that would not be available otherwise, including:

- Storing off-peak solar energy generation for self-consumption or export during higher value, on-peak times
- Providing on-site power to loads during periods of peak demand to reduce utility demand constraints and offset customer electricity demand charges

- Supplying reliable backup power during power disruptions and outages
- Delivering value to the larger grid through services such as frequency regulation, voltage support, and transmission and distribution congestion relief and upgrade deferral

II. The IRS Should Clarify Uncertainties About The Treatment Of Energy Storage Devices Under Section 48.

Although existing regulations have codified that energy storages devices fall within the definition of solar energy property, some uncertainties persist about the treatment of energy storage devices for the purposes of the investment tax credit under § 48 of the U.S. tax code. CEG urges the Internal Revenue Service to clarify these uncertainties in the new regulations it promulgates under Section 48.

Specifically, the Internal Revenue Service should clarify the Section 48 tax credit eligibility for A) integrated solar and energy storage systems owned by multiple commercial entities, B) energy storage systems incorporated into existing solar energy systems, and C) solar and energy storage systems using separate inverters; and it should also clarify D) conditions related to dual use energy storage properties.

Energy storage devices are being deployed in combination with renewable energy systems with increasing frequency in the United States.⁴ It behooves the Internal Revenue Service to clarify the tax eligibility rules related to these devices now to help ensure a more consistent treatment under Section 48.

A. The IRS Should Clarify That Where Multiple Qualifying Commercial Entities Own An Integrated Solar And Energy Storage System, Each Is Proportionally Eligible For The Section 48 Investment Tax Credit For Their Ownership Interest In The Overall System.

Clean Energy Group recommends that the Internal Revenue Service promulgate new Section 48 regulations that clarify the treatment of integrated solar and energy storage systems owned by more than one commercial entity. CEG suggests that each qualifying part of an energy system should be eligible for the Section 48 investment tax credit even if multiple businesses have ownership interests in the system.

For example, if a solar energy system is owned by a separate commercial entity than the integrated storage system, both entities should be allowed to apply the credit to their proportional property interests of the overall system. This treatment would align with PLR 201536017 issued July 28, 2015. PLR 201536017 concluded that an owner of photovoltaic panels in an offsite, community-shared solar array (who also was a joint owner of associated racking, inverter, and

⁴ According to the latest U.S. Energy Storage Monitor report for Q3 2015, prepared by GTM Research and the Energy Storage Association, U.S. energy storage deployment surpassed 100 megawatts of storage by the third quarter of 2015, more than total energy storage deployment in any previous given year. Total energy storage deployment for 2015 is expected to amount to 192 megawatts, triple the level of deployment in 2014, a trend that is expected to continue in coming years.

wiring equipment in the array) was eligible for the residential tax credit under Section 25D for his ownership interest in the solar energy system. Although PLR 201536017 was in the context of the Section 25D rather than Section 48, CEG sees no reason why the logic of this private letter ruling should not apply to energy property under Section 48.

B. The IRS Should Clarify That The Section 48 Investment Tax Credit Can Be Applied To Energy Storage Systems Incorporated Into Previously Installed Solar Energy Systems.

Clean Energy Group recommends that any new Internal Revenue Service regulations confirm that the investment tax credit under Section 48 can be applied to energy storage systems incorporated into already installed solar energy systems. Energy storage devices added to an existing solar energy system can still act as an integral component of the overall energy system when placed in service.

C. The IRS Should Clarify That The Section 48 Investment Tax Credit Can Be Applied To The Components of An Energy Storage System When Integrated Into A Solar Energy System.

Clean Energy Group recommends that Internal Revenue Service clarify in new regulations that the Section 48 tax credit can apply to the components of an integrated solar and energy storage system. CEG suggests that Section 48 investment tax credit eligibility should extend to all integral components of a solar and storage system even in instances where more than one inverter is used. In many cases, separate inverters are a necessity or represent the optimal system configuration (for example, solar energy systems with individual microinverters associated with each solar panel or solar retrofits with existing inverters not compatible with energy storage technologies).

D. The IRS Should Reevaluate Application Of The “75 Percent Cliff” Rule For Dual-Use Energy Storage Properties.

Finally, CEG recommends that the IRS reevaluate the “75 percent cliff” rule as applied to dual use energy storage properties in new Section 48 regulations.

Treasury Regulation § 1.48-9(d)(6) states that “[s]olar energy property does not include equipment (auxiliary equipment)...that use a source of power other than solar or wind energy to provide usable energy,” but that “[s]olar energy property does include equipment, such as ducts and hot water tanks, which is utilized by both auxiliary equipment and solar energy equipment (dual use equipment).” Section 1.48-9(d)(6) further provides that dual use equipment is solar energy property “(i) only if its use of energy from sources other than solar energy does not exceed 25 percent of its total energy input in an annual measuring period and (ii) only to the extent of its basis of cost allocable to its use of solar or wind energy during an annual measuring period.” This provision has been referred to as the “75 percent cliff” rule because it makes dual use property charged less than 75 percent by qualified sources of generation over a designated 365-day period of operation ineligible for the Section 48 investment tax credit.

PLR 201308005 treated the storage components of integrated storage and solar energy systems installed by a particular taxpayer as dual use equipment subject to the “75 percent cliff” rule. The dual use designation for energy storage devices that may be charged by both qualifying and non-qualifying energy resources poses serious problems for many integrated solar and energy storage projects for a number of reasons. It can often be difficult for an integrated solar and energy project to accurately anticipate how an energy storage system will be used throughout its operational lifetime due to evolving use cases and regulatory environments. It can also be challenging to accurately account for the origin of electricity flowing to the energy storage system. IRS has not provided guidance for how this tracking of energy inputs should be accomplished.

Clean Energy Group understands the intent behind the rule: to ensure that the systems as a whole derive energy principally through solar energy inputs rather than non-solar energy inputs. That purpose should be maintained in any future rule making.

However, because of these complications arising from the current rules, CEG recommends reevaluating the “75 percent cliff” rule for integrated solar and energy storage. Tax treatment under Section 25D may offer helpful guideposts. CEG encourages IRS consideration of the following adjustments to treatment of energy storage systems and associated components as dual use property:

- Issuing standardized protocols for tracking and accounting for energy inputs.
- Adjusting the required solar energy input percentage threshold to a lower level, perhaps to a 50 percent and above rule, which would assure that the system is primarily powered by solar electricity. With recapture, any operation not associated with qualified energy inputs will be reclaimed regardless of the defined percentage level.
- Exempting specific storage use case scenarios from dual use classification, including resiliency applications like backup power supply, applications that address the drawbacks of solar generation, such as energy smoothing and frequency regulation, and applications under which energy is only temporarily drawn from the utility grid, such as fast-response frequency regulation.

III. Conclusion

By affirming that all types of energy storage devices qualify as “solar energy property” and by elucidating their treatment in new Section 48 regulations, the Internal Revenue Service could provide greater market clarity. In doing so, the Internal Revenue Service could also reduce its administrative burden by obviating the need to issue as many ad hoc Private Letter Rulings on this topic. Moreover, since Private Letter Rulings do not represent binding precedent for other taxpayers beyond the petitioning taxpayer, clarifying in regulation the treatment of energy storage devices under Section 48 would help ensure more even across-the-board tax application.

In closing, CEG believes that the deployment of energy storage is integral to ensuring the continuing success of distributed solar in the United States. The inclusion of energy storage

technologies adds value and functionality not only to individual solar energy systems, but to the larger integrated electric power system as well.

Thank you for your consideration of these comments.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read 'Nate Hausman', with a long horizontal flourish extending to the right.

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