



February 16, 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 on the definition of qualified property for purposes of the energy credit under Section 48

To Whom It May Concern:

The Solar Energy Industries Association (“SEIA”) is the national trade association for the U.S. solar energy industry. On behalf of our 1,000 member companies and the more than 143,000 American taxpayers employed by the solar industry, we appreciate the opportunity to submit comments in response to Notice 2015-70 concerning definitions of Section 48 property for purpose of the investment tax credit (“ITC”).

The ITC has been critical to the tremendous growth of solar energy in the United States. In just the last few years, innovations in business models and technologies have reduced costs and enabled consumers to more efficiently and cost-effectively manage their energy supply, demand, and consumption. New products like energy storage, for example, are further expanding capabilities to enable consumers to use their solar energy when the sun is no longer shining, during grid blackouts when the solar energy system would otherwise be required to shut down, and even to stabilize the grid in lieu of fossil fuel power plants. In contrast to the rapid transformation of the energy sector, many of the regulations concerning taxpayers’ eligibility for the ITC date as far back as 1964. Indeed, the last substantive update to the definition of qualifying energy property was in the 1980s, which reflected market and technological realities of a very different era of our nation’s energy history.

Notice 2015-70 is an important first step forward to modernize tax regulations concerning the solar ITC and ensure the sound administration of the credit in keeping with the intent of Congress. SEIA provides the following comments to clarify recurring issues, reflect current technologies, and propose new provisions where new approaches are necessary.

Executive Summary of Comments

I. Re-Affirm Integral Property Rule

Longstanding regulations under the ITC provide that tangible property that is an “integral part” of certain qualifying activities, including the furnishing of electricity, qualify for the ITC even if such property performs an ancillary function to the principal equipment (e.g., energy generating equipment). New regulations should re-affirm the ITC eligibility of integral property.

II. Re-Affirm Building Component Rule

New regulations should re-affirm the longstanding principle that tangible personal property includes all property (other than buildings and structural components of buildings) which are contained in or attached to a building, and furthermore, that such property which is contained in or attached to a building constitutes tangible personal property for purposes of the credit allowed by IRC section 38.

III. Re-Affirm a Storage Device is Qualifying ITC System Property

New regulations should re-affirm the ITC eligibility of energy storage devices generally and provide clarifying language that more expressly mentions electric applications, regardless of technology. The legislative history makes clear that Congress recognized even at the beginning of the energy ITC in 1978 the importance of storage devices as a critical part of an overall energy system enabling the storage of energy at the moment it is generated and the release of it over subsequent moments in time when the end user needs the energy.

IV. Revise the Dual Use Equipment Rule to Provide Flexibility and Certainty to Taxpayers

- A. New regulations should remove the 75% Cliff as a threshold eligibility requirement for ITC eligibility because the 75% Cliff has no basis in statutory or legislative history. At a minimum, eligible basis should include that portion of basis that is attributable to energy property.
- B. New regulations should confirm that taxpayers may aggregate qualifying energy sources in basis calculations because the current regulations inconsistently apply the 75% Cliff to solar, wind, and geothermal technologies. In addition, the new regulations should more clearly provide that ITC-eligible inputs may be aggregated to the extent eligible basis must be determined by energy inputs.
- C. New regulations should modernize the Dual Use Equipment rule applying a Primary Use standard for full ITC eligibility. As a result, energy property may be 100% ITC eligible if the property's primary use is as solar energy property. Adoption of a Primary Use standard for ITC eligibility would bring the energy property regulations into conformity with existing depreciation and change in use rules with respect to Dual Use Equipment.
- D. To provide additional certainty to taxpayers, the new regulations should provide that the determination of a unit of property's primary use for ITC purposes may be deemed satisfied if:
 - i. the property enables the taxpayer to use the qualifying energy source when local utility service is not available; or
 - ii. at least 50% of the allocable energy inputs is solar energy.

V. Apply Integral Property and Primary Use Standard to Dual Function Property

- A. New regulations should clarify that property engaged in a qualifying activity and another ancillary non-energy function will not result in a reduction in qualifying basis. Qualification of such property for the ITC should be based on whether such property is integral to the function of solar energy property or, alternatively, whether its "primary use" is to serve a solar energy function. That is, a unit of property may be 100% eligible for the ITC if the component is integral to the solar energy function even when such component part provides an ancillary non-energy function.

VI. Clarify Technical Issues Concerning Solar Energy Property that Includes a Storage Device

- A. New regulations should clarify that storage devices added to existing, operational projects may be eligible for the ITC.
- B. New regulations should clarify that storage devices should not be rendered ineligible for the ITC solely because of separate ownership of the storage device relative to other system property.
- C. New regulations should clarify that otherwise qualifying energy property should not be rendered ineligible if system property is divided between the IRC section 48 credit and the IRC section 25D credit.

Overview of ITC and Need for Modernized Regulations

The ITC was originally enacted in 1962 in order to spur economic growth by incentivizing investments in various capital projects across many industries including energy, transportation and communications.¹ From the first ITC in 1962 (a tax credit for 7% of capital spend) to the present-day ITC (30 or 10% of capital spend depending on the energy technology), frequent legislative changes have at times repealed

¹ Revenue Act of 1962, Pub. L. No. 87-834 § 2, 76 Stat. 960, 962-73.

and suspended the ITC, changed the amount of the credit and eligibility rules, and added or subtracted qualifying types of investment activities.²

Investments in renewable energy were first incentivized in 1978, when the Energy Tax Act added a 10% energy ITC available to businesses investing in solar, wind, geothermal and other types of alternative energy property (e.g., cogeneration).³

In 1981, the Internal Revenue Service (“IRS”) issued final regulations under IRC Section 48 that are still applicable today.⁴ By 1986, the ITC expired for most types of non-energy property, however, the energy ITC was extended for certain types of alternative energy property.⁵

In 1987, the IRS revised its regulations with respect to “dual use equipment.” These regulations clarified that certain equipment that uses solar, wind, or geothermal energy is eligible for the energy ITC to the extent the property uses a qualified energy source, so long as the use of non-qualified energy does not exceed 25% of the total energy used by the equipment in an annual measuring period.⁶

In 1990, the Omnibus Budget Reconciliation Act eliminated certain expired and obsolete ITC provisions and enacted new versions of IRC sections 46 through 50.⁷ The ITC was then extended and made permanent by the Energy Policy Act of 1992.⁸

The Energy Policy Act of 2005 increased the tax credit percentage to 30% of the cost basis of the qualified property or facility in the year in which such property is placed in service.⁹

Subsequent legislation extended the ITC, which is currently set to phase down for solar beginning in 2020 from a 30% ITC to a permanent 10% credit in 2024.¹⁰

New Regulations Should Continue to Respect Integral Property as Qualifying Solar Energy Property

I. Overview

Longstanding regulations under the ITC provide that tangible property that is an “integral part” of certain qualifying activities, including the furnishing of electricity, qualify for the ITC even if such property performs an ancillary function to the principal equipment (e.g., energy generating equipment).¹¹

² Pub. L. No. 89-800, 80 Stat. 1508; Tax Reform Act of 1969, Pub. L. No. 91-172, 83 Stat. 487; Tax Reduction Act of 1975, Pub. L. No. 94-12, § 301 (a), 89 Stat. 26, 36.

³ Energy Tax Act of 1978, Pub. L. No. 95-6 18, § 301, 92 Stat. 3174, 3194-3201.

⁴ Treas. Reg. § 1.48-9, T.D. 7765, 46 FR 7287 (Jan. 1, 1981).

⁵ H.R. Conf. Rep. No. 99-841, Vol. 2, at 128-29 (1986).

⁶ Treas. Reg. § 1.48-9, T.D. 8147, 52 FR 27336 (July 20, 1987).

⁷ Revenue Reconciliation Act of 1990, Pub. L. No. 101-508, § 11813, 104 Stat. 1388-400 (1990).

⁸ Energy Policy Act of 1992, Pub. L. No. 102-486, 106 Stat. 2776, 3024 (1992).

⁹ Energy Policy Act of 2005, Pub. L. No. 109-58, 119 Stat 594 (2005).

¹⁰ On December 18, 2015, President Obama signed Public Law 114-113, which includes two primary components, the Protecting Americans from Tax Hikes Act of 2015 (the “PATH Act”), and the Consolidated Appropriations Act of 2016 (the “Omnibus bill”), providing for extensions of the solar ITC, other ITC technologies, and other technologies eligible to claim a production tax credit under IRC section 45.

¹¹ Treas. Reg. § 1.48-1(d)(4).

Specifically, property is used as an integral part of a qualifying activity if “it is used directly in the [qualifying] activity and is essential to the completeness of the [qualifying] activity.”¹²

Courts have construed these regulations in the context of energy generation facilities and observed that “[o]ther courts have interpreted these requirements quite broadly.”¹³ Indeed, the “integral part” standard has been a fixture of the ITC going back to 1964, when those regulations were first promulgated.¹⁴

The energy property regulations in Treas. Reg. section 1.48-9(b)(2) incorporate the general ITC rules, including the ‘integral part’ standard. The Section 1603 Treasury Program (the “1603 Program”) adopted these same principles: “Qualified property includes only tangible property that is an integral part of the qualified facility....Property is an integral part of a qualified facility if the property is used directly in the qualified facility and is essential to the completeness of the activity performed in that facility.”¹⁵

The intended use of property is pervasive in the ITC context, and a determination of the intended use of ITC property is critical for initially determining whether property is an “integral part” of a qualifying activity when originally placed in service.¹⁶

New regulations should re-affirm the ITC eligibility of integral property.

II. Examples of Integral Property Rule Issues

a. Safety Equipment

As solar becomes more prevalent, local building codes and national standards are mandating additional safety equipment. Two examples are a rapid shut-down¹⁷ and a utility disconnect.¹⁸

If the regulations attempt to enumerate all safety equipment that is deemed “integral” for investment tax credit eligibility purposes, there is a possibility that safety equipment developed in the future could be inadvertently excluded. Such omission could be avoided by adopting a general standard that any safety equipment that is required by the applicable building code or included in a widely recognized standard

¹² *Id.*

¹³ *New England Elec. Sys. v. United States*, 28 Fed. Cl. 720, 725. (1993) (holding fishways required to be built by FERC, which were “downstream” of the generating-facilities, constituted an integral part of the hydropower plant); *see also Consol. Freightways, Inc. v. Comm’r*, 74 T.C. 768, 799 (1980) (fences around dock facilities), *affd.* in part and *revd.* in part on other grounds, 708 F.2d 1385 (9th Cir. 1983); *Spalding v. Comm’r*, 66 T.C. 1017, 1023-24 (1976) (fences around auto wrecking business); *Spartanburg Terminal Co. v. Comm’r*, 66 T.C. 916, 939 (1976) (chain link fences and gates built around a railroad tunnel); *Southern Pac. Transp. Co. v. Comm’r*, 90 T.C. 771 (1988) (overpasses above railroad tracks and roadbeds); Tech. Adv. Memo. 8201002 (Dec. 31, 1980) (“the phrase ‘used directly in the activity’ [in Treas. Reg. § 1.48-1(d)(4)] is not to be given an overly restrictive interpretation”).

¹⁴ *See* T.D. 6731, 1964-1 C.B. (Part 1) 11, 37.

¹⁵ U.S. Treasury, “Payments for Specified Energy Property in Lieu of Tax Credits under the American Recovery Act of 2009” (“1603 Guidance”), Revised Apr. 2011.

¹⁶ *See* Treas. Reg. § 1.48-1(d)(4) (same standard); Notice 2013-29, § 4.05, 2013 I.R.B. 1085.

¹⁷ A rapid shut down cuts off the flow of DC electricity from the solar panels into the house. DC voltage continues to be generated by the solar panels during daylight hours, but the electricity is prevented from flowing through the wires inside the home. The functional components of the rapid shutdown, which are located in the basement, cut off the flow of DC electricity from the solar panels into the house. Firefighter organizations nationally have requested that this “shutdown” feature be an electrical code requirement for solar systems to protect firefighters because they could otherwise be electrocuted by a live wire in the course of combatting a fire. The rapid shutdown can be activated manually from outside the home in the event of a fire.

¹⁸ A utility disconnect is a safety feature required by utilities. Like the rapid shutdown, the utility disconnect is the means for cutting off the flow of the DC electricity being generated by the solar panels during the day, as there is no means to actually prevent the solar panels from generating electricity when there is sunlight. Utilities require the disconnect in order to protect utility-line workers from getting shocked while working on power lines near an operational solar array.

(e.g., the National Electricity Code¹⁹ (“NEC”)) for solar projects to prevent or mitigate fires or shocks is deemed to be integral.

Another example is an electrical panel upgrade, which is required when installing a solar photovoltaic (“PV”) system on certain residential and commercial buildings. The electrical panel is a metal electrical service box that accepts the main power to the home and distributes electrical current to the various circuits within the home. If the backfeed of electricity from the PV system exceeds the capacity of the main electrical panel, it can result in an overheated bus bar that may result in an electrical fire. For this reason, NEC Section 705.12(D) limits the amount of current from a secondary generation source that can be fed back onto the load side of a panelboard. This limit is set by the National Fire Protection Association and NEC, and is strictly enforced by all governing bodies.²⁰ In order to avoid exceeding the backfeed limit, and the associated fire risk, a main panel upgrade is sometimes required. Additionally, a home’s existing panelboard used for PV connection may be damaged, no longer code compliant, or no longer approved by the local jurisdiction, and adding a PV system can similarly create a risk of fire. For these reasons, a new main electric panel is sometimes necessary to interconnect a residential rooftop solar system, and should therefore qualify as integral property.

b. Roadways and Parking Areas

Ground-mounted and certain other solar energy facilities include roadways and parking areas that are dedicated to the maintenance and operation of the facility. These parts of the facility are used for the transportation of equipment and personnel necessary to perform the energy producing activities for the facility. Without these facility parts, access to and maintenance of solar panels, inverters, transformers, and other system property is jeopardized. The 1603 Program considered roadways and paved parking areas located at a qualified facility and used for transport of equipment to be used in maintaining and operating the facility as integral to the qualified facility.²¹ This was based on a 1971 revenue ruling that held that equipment that is integral to production/manufacturing activities includes roads used to transport raw materials, supplies and finished and semi-finished products.²² That ruling went on to hold that roads used solely for employee and visitor vehicle traffic are not integral to the production activity.

The IRS has consistently held that property that is integral to the qualifying activity is itself eligible. For example, the IRS recognized this where it held that a hydroelectric facility qualified for an energy credit because it met the requirements of the former Internal Revenue Code (“IRC”) section 48(l) (the energy credit provisions) and consisted of tangible personal property and other property that is integral the production of electricity.²³

Consistent with the treatment of roadways and paved parking areas under existing tax precedent and under the 1603 Program, new regulations should identify roadways and parking areas dedicated to the transport of equipment used in maintaining and operating a solar facility as integral property that constitutes qualifying solar energy property.

c. Other Property Required by Permit

¹⁹ The NEC is a regionally adoptable standard, which is part of the National Fire Codes series published by the National Fire Protection Association, a private trade association. The NEC is not federal law and is not required to be followed. Rather, it is typically adopted by states and municipalities in an effort to standardize their enforcement of safe electrical practices.

²⁰ Additionally, NEC Section 705.12(A) indicates that a secondary generation source may backfeed current equal to the service size on the supply side up of a panelboard. These connections are commonly incompatible without damaging existing equipment. Some local jurisdictions and utilities do not accept these types of connections, or do not accept the hardware that allows these types of connections.

²¹ 1603 Guidance, *supra* note 15.

²² Rev. Rul. 71-55, 1971-2 C.B. 65.

²³ See PLR 8628033 (Apr. 11, 1986).

Similar to the discussion of safety equipment above, local governmental authorities often require the incorporation of certain system property into the construction of a facility. For example, permits or governmental approvals may require fencing to be constructed as part of a solar development in order to protect individuals and wildlife from hazardous equipment included in the facility.²⁴ If such fencing is not constructed, the owner of the facility will not be in compliance with these requirements, and thus may not be entitled to operate the facility until the deficiency is remedied.

The regulations should recognize that local governmental authorities may place restrictions and other requirements on facility development that must be satisfied in order to operate the facility in compliance with applicable law. To the extent these requirements include the incorporation of specified tangible property into the facility's design or construction, the regulations should specify that such property shall be considered integral property that constitutes qualifying energy property. It should also be noted that the IRS and courts have addressed affirmatively whether items designed to protect the eligible equipment or protect people from the eligible equipment are themselves eligible. For example, the Tax Court has held that fencing is an eligible cost if the fence is built to protect the property from theft and vandalism. Security systems should be treated the same as a fence. In Oregon Trail Mushroom,²⁵ the Tax Court held:

OTM erected a chain link fence on its property. Petitioner argues that the fence is an integral part of the production of mushrooms because it keeps vandals and animals out of the facility and is, thus, within the definition of other tangible property. We have held previously that fences erected to deter theft are an integral part of manufacturing and production and therefore qualify for an ITC as other tangible property. In the instant case, the fence was erected to protect the facility from thieves, vandals, and stray animals which could damage the facility and the mushroom crop. Therefore, we hold that the chain link fence is property used as an integral part of manufacturing or production and thus qualifies as other tangible property.

Qualifying Solar Energy Property

I. Overview

Recognizing the diversity of technologies that comprise the solar industries that operate in the United States and abroad, SEIA offers the following non-exhaustive list of parts that are commonly included in commercial solar energy systems whose eligible basis will be included in the determination of energy property and the ITC pursuant to IRC section 48(a)(3)(i).

It is important at the outset to recognize that the definition of energy property under IRC section 48 is determined on a unit-of-property by unit-of-property basis, unlike the determination of a "qualified facility" under IRC section 45. For example, IRC section 168(e)(3)(B)(vi) provides that the term "5-year property" includes solar or wind energy property. But energy property is not restricted to a singular unit of property. In fact, qualifying ITC-eligible activities typically involve multiple units of property depreciated as separate assets. Therefore, under sections 48, 167, and 168 of the Code, a taxpayer must start by determining what constitutes each depreciable asset on a unit-of-property by unit-of-property basis to determine (1) the appropriate recovery period of the asset under section 168, (2) the date on which depreciation begins with respect to the property (i.e., the placed in service date), (3) whether the property meets the definition of energy property, and (4) the date on which a disposition may occur with respect to the property. For this purpose, all property determined to be functionally interdependent will generally be considered placed in service on the same date, but not necessarily considered a single depreciable asset for cost recovery or disposition purposes or a single unit of property for energy credit purposes.

²⁴ Rev. Rul. 66-89, 1966-1 C.B. 7 (fences used to confine livestock in pastures and to keep livestock out of hazardous areas qualified as Section 38 property because they are essential to the cultivation activity.)

²⁵ TC Memo 1992-293 (internal citations omitted).

Treas. Reg. section 1.263(a)-3(e)(3)(i) provides that all the components that are functionally interdependent comprise a single unit of property. Components are functionally interdependent if the placing in service of one component is dependent on the placing in service of the other component. As discussed herein, the current regulations, legislative and regulatory history of the ITC for solar energy property clearly establish that solar energy property is not restricted to solely those components that are functionally interdependent to form a single unit of property or asset for depreciation purposes. Instead, it is clear that energy property is comprised of multiple units of property or assets for depreciation purposes that are not together functionally interdependent, but are integral to the qualifying activity. In the case of solar energy property, the qualifying activity is the use of solar energy to generate and provide electricity, heating or cooling, or hot water.

A. Photovoltaic Systems (including concentrated photovoltaic systems)

Any device which converts sunlight into electricity, including:

1. solar PV panels, cells or modules including thin-film and crystalline systems.
2. lenses, mirrors, parabolic reflectors, heliostats, or similar equipment used to focus sunlight onto solar PV panels, cells or modules.
3. inverters and related inverter-like equipment, used primarily to convert electricity between direct current and alternating current, and to manage alternative sources of energy, where applicable.
4. Materials or coatings for materials that generate electricity by sunlight (e.g., PV paint).

B. Non-photovoltaic Concentrating Solar Power Systems

Any device which use mirrors, reflectors, magnifiers or similar technology to focus or concentrate solar energy and convert it into heat, including

1. lenses, mirrors, parabolic reflectors, heliostats, or similar equipment that concentrates or focuses solar energy
2. pipes, tubing, receivers, or other devices or structures containing a material that is heated,
3. materials or equipment which enables the transfer of heat or a heated material, heat exchangers and heat dumps to the external environment necessary or appropriate to maintain reliable electrical output and safeguard cell life, regardless of whether there is a reduction in net operating efficiency.
4. the material which is heated, including oil, other fluids, molten salt, or gas to the extent that the cost of the material is recovered through depreciation or amortization
5. a device that uses the heated material to heat water to create steam
6. a device that uses the heated material to drive an engine to generate electricity, and appropriate parts and accessories related to the generation of electricity by the engine.
7. a generator or steam engine that uses the steam to generate electricity, and appropriate parts and accessories related to the generation of electricity from steam.

C. Thermal Systems

System property similar to those described in sections A and B which are employed in heating, cooling, or providing hot water in or to a structure, or to provide solar process heat, other than to heat a swimming pool.

D. Items Relevant to All Systems

1. Controllers to manage the use of solar energy, where applicable, including:
 - a. equipment primarily designed to supply solar-generated electricity to the grid
 - b. equipment primarily designed to supply solar-generated electricity to a non-grid application or customer, including those that are designed to work only with a battery backup or generator that uses another fuel in off-grid situations,
 - c. equipment that works primarily with solar-generated electricity, and also one or more additional energy sources when the sun is unavailable or where necessary or appropriate during a power failure.
 - d. related controllers, including those related to safety, protection of the system, and activation and deactivation of alternate power sources, as necessary or appropriate.

2. Mounting structures, including
 - a. rails, racking, caps, clamps, anchors, connectors, ballast and similar parts and fixtures appropriate to the type, size and weight of the energy property, and to withstand weather or environmental conditions,
 - b. attachments and improvements to other facilities that serve a non-energy purpose to enable the energy property to work in conjunction with such non-energy property or to work adjacent to such property, such as structures that allow sunlight to pass-through their surfaces while protecting the energy property from damage by weather, roofing materials, so called "carport" roofs, extensions to light stands or poles, and a proportionate share of the non-energy property to the extent used by the energy property in the generation of electricity, such as white roofs, where applicable (see discussion herein on equipment that provides dual function),
 - c. structure designed or equipment necessary or appropriate to install, cool, maintain or facilitate installation or maintenance of the equipment as required,
 - d. reasonable cosmetic structures (not including a building or similar structure) designed to assure that facility has an appropriate appearance in the context of where it is located, and
 - e. tracking devices or mountings that enable the structure to follow the sunlight or moonlight, the latter being reflected sunlight.
3. Energy storage devices, including batteries but regardless of technology, associated storage equipment and other devices or means of providing storage appropriate to:
 - a. store energy output from energy property for use at a later point in time, including technologies such as ice storage and pumped hydro where the work represented by energy may change forms prior to the ultimate end result of usable heat or electrical energy
 - b. enable use of solar energy through periods of darkness, grid outages and other environmental or weather conditions in which energy property would otherwise be required to shut down
 - c. level fluctuations in output or availability of energy
 - d. improve energy reliability
 - e. take advantage of pricing differences for time of day tariffs
 - f. address power failures and reasonable maintenance
 - g. stabilize grid fluctuations in energy supply and demand

Batteries, regardless of technology, and storage equipment generally also includes controllers for operation, charging and maintenance, and appropriate systems or devices to integrate the batteries into the system.
4. Other Property which is an integral part of generating heat or electricity from solar energy, or to operate, maintain or repair the system, including
 - a. power conditioning equipment
 - b. step-up transformers that increase the voltage of the electricity generated to the voltage of the high voltage transmission line and transfer equipment. Equipment beyond the step-up transformer is qualified property if that property is related to the functioning of the transformer or of transfer equipment.
 - c. Lightning or surge arrestors, cables, switchgear, fuses, circuit breakers that are necessary or appropriate to maintain, protect, isolate or facilitate the repair of transformers or other energy property
 - d. Meters that measure electricity produced or which are part of the control of operations or maintenance of any energy property
 - e. System property that is needed to ensure the system's safe and effective operation, including a monitoring system, electrical panel upgrade, electrical box and the rapid shutdown mechanism.
 - f. Roadways, parking areas, fencing, and other property required by permit which is integral to the operation or maintenance of the facility, or the safety or protection of others in interacting with the facility and any hazardous equipment.
5. Other Capital Expenditures. Any amount that is:

- a. properly chargeable to capital account, for which depreciation or amortization is allowable, incurred in connection with the ultimate deployment of energy property, and incurred for costs and fees associated with design and engineering, legal expenses, insurance premiums, development fees, and other development related costs, if under existing capitalization principles they are appropriately added to the depreciable basis of the energy property, and
- b. Construction period interest and taxes that are properly treated by the taxpayer as chargeable to capital account with respect to such energy property.

Distinguishing Solar Energy Property from Building Components

In many cases, solar energy property is connected to buildings or other permanent structures. At the outset, SEIA proposes that the new regulations re-affirm the longstanding principle that tangible personal property includes all property (other than buildings and structural components of buildings) which are contained in or attached to a building, and furthermore, that such property which is contained in or attached to a building constitutes tangible personal property for purposes of the credit allowed by section 38.²⁶ The relevant legislative history suggests broad application of this rule for purposes of determining property that may qualify for the ITC.²⁷

Revenue Ruling 79-183²⁸ also provided an exception to this general rule and concluded that a structural component of a building will qualify for the investment tax credit when it is so specifically engineered that it is in essence part of the machinery or equipment with which it functions. The IRS has applied this exception in several rulings involving solar energy property. For example, the IRS ruled that a PV curtain wall designed and engineered for the taxpayer's commercial building served the dual purpose of (1) generating electricity through the use of solar energy, and (2) enclosing the building or structure²⁹ Accordingly, the IRS ruled that the elements of the purchase price that were described in the ruling (the identity of which was redacted) constituted solar energy property.³⁰

In a ruling involving a roof-mounted solar energy generation system, the IRS similarly held that a structural component, the identity of which was redacted ("Redacted Component") was solar energy property based on the exception for "specifically engineered" structural components³¹ While the ruling is heavily redacted, the Redacted Component appears to be a component of the system that provides roof protection. The facts in the ruling indicated that the Redacted Component and the other system property that comprised the system were separate units of property but were integrated and inseparable as a single system, and were not sold by the taxpayer without the balance of the system. The IRS concluded that the basis of the Redacted Component should be apportioned between the portion of the Redacted Component that performed the function of a roof and the portion that functioned as part of the equipment, and the basis attributable to the structural portion of the property is not considered solar energy property.³²

²⁶ Treas. Reg. § 1.48-1(c).

²⁷ See S. Rept. No. 1881, 87th Cong., 2d Sess. (1962), 1962-3 C.B. 707, 858 ("Tangible personal property is not intended to be defined narrowly here, nor to necessarily follow the rules of State law. It is intended that assets accessory to a business..., even though fixtures under local law, are to qualify for the credit."); H. Rept. No. 1447, 87th Cong., 2d Sess. (1962), 1962-3 C.B. 405, 515-516 ("Assets accessory to the operation of a business...generally constitute tangible personal property for purposes of section 48, even though such assets may be termed fixtures under local law.").

²⁸ 1979-1 C.B. 44.

²⁹ PLR 201043023 (Oct. 29, 2010).

³⁰ *Id.*

³¹ PLR. 201121005 (May 5, 2011).

³² *Id.* See also PLR 20144025 (May 5, 2014) (requiring the taxpayer to exclude a portion of the basis of certain components of a solar energy generation system from the solar energy property to the extent of the basis that was properly allocable to the portion of such property that functioned as a structural component).

Congress Intended to Include Energy Storage Devices in the Definition of Energy Property

Current Treasury regulations clearly provide that energy storage devices used to store certain types of renewable energy are considered to be energy property for purposes of the ITC under IRC section 48. In the case of solar energy, for example, “Solar energy property includes equipment that uses solar energy to generate electricity, and includes storage devices, power conditioning equipment, transfer equipment, and parts related to the functioning of those items” (emphasis added).³³

Although the exact language of the regulations often emphasizes thermal storage like storage tanks for solar water heating systems, the legislative history of IRC section 48 makes it clear that Congress recognized even at the beginning of the energy ITC in 1978 the importance of both electric and thermal storage devices as a critical part of an overall energy system to be able to store energy at the moment it is generated and release it at a subsequent moment in time when the end user needs the energy:

Specifically, the House report provides:

In the case of solar and wind energy equipment, the credit applies to such equipment (and parts solely related to the functioning of such equipment) which use solar and wind energy (either separately or to supplement each other) to provide heat, cooling, hot water or electricity. Generally, a solar energy equipment system involves the transformation of sunlight into heat and electricity through the use of such devices as solar cells or other collectors, storage systems for electricity and for hot air or hot water (including rock beds), heat exchangers to utilize captured and stored energy, and related equipment, such as fans and thermostats. The credit for wind equipment similarly applies to the windmill or other devices to harness outdoor moving air to provide electricity and other forms of energy and includes storage and transfer systems to distribute this energy.³⁴

Further, the Senate report provides:

Equipment which uses solar or wind energy to provide heat, cooling, electricity or hot water in connection with a building or structure is eligible for the credit. Generally, a solar energy equipment system involves the transformation of sunlight into heat or electricity through the use of such devices as solar cells or other collectors, storage systems for electricity and for hot air or hot water (including rock beds), heat exchangers to utilize captured and stored energy, and related equipment, such as fans and thermostats. The credit for wind equipment similarly applies to the windmill or other devices to harness outdoor moving air to provide electricity and other forms of energy and includes storage and transfer systems to distribute this energy.³⁵

The Treasury even noted in original regulations for the energy ITC: “In response to comments, the [proposed language concerning the] definition of solar energy property was expanded to make it clear that it includes storage devices, power conditioning equipment, transfer equipment, and property solely related to the functioning of those items.”³⁶

There is nothing in the legislative history to suggest that Congress intended to provide an energy credit solely for the one component of an overall system that actually produces electricity. Without power conditioning equipment like an inverter to convert DC to AC, for example, it would be impossible to move electrons generated by a solar panel to either the end user or the electric grid both relying on AC. Nearly 40 years of tax authorities and precedent provide a strong foundation to affirm in new regulations that

³³ Treas. Reg. § 1.48-9(d)(3).

³⁴ H.R. 95-496 (Part III), 95th Cong., 1st Sess. (1977), at 237 (emphasis added).

³⁵ S. Rep. No. 95-529, 95th Cong., 2d Sess. (Vol. 2) (1978) (emphasis added).

³⁶ 46 FR 7287-01, supra note 4.

qualifying energy property includes other units of property like storage devices, power conditioning equipment, and transfer equipment that enable the taxpayer to make the best use of the energy precisely when it is needed and in a manner that preserves the stability of existing energy infrastructure.

SEIA proposes that the new regulations re-affirm the ITC eligibility of energy storage devices generally and provide clarifying language that more expressly mentions electric applications, regardless of technology. For example, language from Treas. Reg. section 1.48-9(d)(1) only focuses on thermal equipment:

Generally, those functions are accomplished through the use of equipment such as collectors (to absorb sunlight and create hot liquids or air), storage tanks (to store hot liquids), rockbeds (to store hot air), thermostats (to activate pumps or fans which circulate the hot liquids or air), and heat exchangers (to utilize hot liquids or air to create hot air or water).

The new regulations should reference solar electric generation property and, similar to “storage tanks” and “rockbeds,” include explicit reference to electric storage devices such as a battery.

ITC Eligibility of Dual Use Equipment

The legislative and regulatory history of prior investment tax credits provide that property may be eligible for the ITC even when such property uses other sources of energy, whether such energy sources are credit-eligible resources or non-qualifying sources like fossil fuels (“Dual Use Equipment”).

The Energy Tax Act of 1978 created a separate ITC for certain alternative energy technologies including solar, wind, and geothermal energy.³⁷ Report language on the Energy Tax Act from the House Ways and Means Committee described the credit applying to “such equipment (and parts solely related to the functioning of such equipment) which use solar and wind energy (either separately or to supplement each other) to provide heat, cooling, hot water or electricity.”³⁸ The Senate Finance Committee report merely provides for “[e]quipment which uses solar or wind energy to provide heat, cooling, electricity, or hot water in connection with a building or structure.”³⁹ The Final Conference Report generally follows the House report language, but with no additional commentary on equipment which uses both the qualifying energy source and non-qualifying energy source.⁴⁰

Regulations originally promulgated at the time under former Treas. Reg. section 1.48-9(d), however, precluded the ITC for any solar, wind, and geothermal energy property that also used any other source of energy. For example, in the case of solar: “Solar energy property also does not include equipment, such as ducts and hot water tanks, whether utilized solely by auxiliary equipment or by both auxiliary equipment and solar energy equipment.”

In 1986, Treasury re-evaluated its restriction on Dual Use Equipment’s ITC eligibility. In proposed regulations that formed the basis for the current Dual Use Equipment rule in the regulations today, Treasury concluded:

Upon reconsideration of the legislative history, it has been determined that, while Congress did not intend that property that does not use qualified energy be eligible for the business energy credit as solar, wind, or geothermal property, Congress also did not intend to adopt an all or nothing rule for dual use solar, wind, or geothermal energy property. Neither the statute nor the legislative history of section 48(l) include this

³⁷ Energy Tax Act of 1978, Pub. L. No. 95–618, § 101, 92 Stat. 3174 (1978).

³⁸ H.R. Rep. No. 95-496, supra note 34.

³⁹ S. Rep. No. 95-529, 95th Cong., 2d Sess. (Vol. 2) (1978).

⁴⁰ Rep. No. 95-1324, 95th Cong., 2d Sess. (1978).

restriction. Where such a restriction was intended (as in the case of the residential energy credit for solar, wind, and geothermal property) the committee reports explicitly said so.⁴¹

Later, Treasury wrote that “the legislative history evidences a Congressional intent not to limit the business energy credit to property which uses only solar, wind, or geothermal energy.”⁴²

SEIA agrees that ITC eligibility should continue to extend to Dual Use Equipment. This year marks the 30-year anniversary of the Dual Use Equipment rule’s introduction and provides a timely opportunity to consider a new, modernized approach to ITC eligibility that can accommodate evolving technologies and business models. SEIA proposes the following improvements and considerations for future updates to ITC regulations concerning Dual Use Equipment.

II. Updated Regulations Should Remove 75% Cliff as a Threshold Eligibility Requirement

As the statutory history generally conditions the eligibility of equipment on use of a qualifying energy source like solar, the current restriction that renders solar energy property completely ineligible for the ITC (if use of non-solar energy is more than 25% of energy inputs (“75% Cliff”)) has little foundation, either in other areas of the IRC or in the rationale put forward when the Dual Use Equipment rule was promulgated in 1987. We therefore respectfully suggest elimination of the 75% Cliff as a threshold enforced by the commissioner.

For example, consider that the general business credit under IRC section 38 historically provides for an allocation between qualifying and non-qualifying property without a similar “cliff” for eligibility when only a portion of property is subject to depreciation:

If a deduction for depreciation is allowable to the taxpayer only with respect to a part of such property, then only the proportionate part of the property with respect to which such deduction is allowable qualifies as section 38 property for the purpose of determining the amount of credit allowable under section 38.⁴³

Other technologies originally qualified under the Energy Tax Act of 1978 also required similar basis allocation requirements and yet imposed no “cliff” on which eligibility was entirely lost. For example, Treas. Reg. section 1.48-9(c)(5) provide that synthetic fuel production equipment is alternative energy property and, “[e]quipment is eligible only to the extent of the equipment’s cost or basis allocable to the annual production of substances used as a fuel or used in the production of a fuel.”⁴⁴ In the example demonstrating the rule’s application, only 50% of the output of the equipment is used to produce alcohol for use in a fuel mixture, and the other 50% is used to produce whiskey. The regulations conclude a credit may be claimed on the corresponding 50% of the equipment’s basis attributable to the synthetic fuel production. In the example, the property only becomes ineligible for the ITC if the equipment is subsequently used “exclusively” to produce whiskey.

The parallel residential homeowner’s solar ITC under the current IRC section 25D implicitly includes a dual use equipment rule with respect to certain expenditures for solar energy property. The language in IRC section 25D(d) was added to the Code by the Energy Policy Act of 2005, which also created the 30% solar ITC under IRC section 48.⁴⁵ IRC section 25D(d)(1) defines “qualified solar water heating property expenditure” and the associated property as fully eligible for the ITC “if at least half of the energy used by

⁴¹ “Proposed Business Energy Investment Credit for Solar, Wind, and Geothermal Energy Property,” Dec. 9, 1986, 51 FR 44315-01.

⁴² *Id.*

⁴³ Treas. Reg. section 1.48-1(b)(2).

⁴⁴ Treas. Reg. section 1.48-9(c)(5).

⁴⁵ Pub. L. No. 109–58, August 8, 2005, 119 Stat 594, at Sec. 1335.

such property for such purpose is derived from the sun.” It should be noted that the original homeowner’s solar ITC enacted in 1978 definitively restricted ITC eligibility to property that solely used solar, wind, or geothermal energy. In construing the intent of Congress in 1986, Treasury emphasized, “Where such a restriction [on dual use equipment] was intended (as in the case of the residential energy credit for solar, wind, and geothermal property) the committee reports explicitly said so.”⁴⁶ Congress, therefore, clearly demonstrated intent when it revised the homeowner’s solar ITC in 2005 to eliminate the standard that precluded eligibility entirely for Dual Use Equipment to the current standard that allows for 100% of the expenditure to qualify for the ITC even if only 50% of the energy used by the equipment is solar energy.

Therefore, under current IRC section 25D rules, a homeowner’s solar energy property may use up to 50% non-solar energy and still remain eligible to claim 100% of the entire ITC on the qualifying expenditure. The rule for solar electric expenditures does not provide identical language, but it is arguably just as flexible, merely requiring that the expenditure is for property “which uses solar energy to generate electricity” with no requirement that property use solely solar energy or some threshold amount.⁴⁷

By contrast, the Dual Use Equipment rule introduced in 1986 created the 75% Cliff with no explanation for the threshold requirement. Neither the proposed rule nor the the Treasury Decision for the final regulations in effect today established through reference to statutory or legislative history why property that uses solar energy will not even be partially eligible for the ITC unless 75% of energy usage is allocable to the qualifying energy source.⁴⁸

The concept may trace its roots to the definition of “qualifying small power production facility” under separate regulations promulgated by the Federal Energy Regulatory Commission (“FERC”) at 18 CFR Part 292, whose classification encapsulated power plants for which 75% or more of a facility’s total energy input is derived from “biomass, waste, renewable resources, geothermal resources, or any combination thereof” and the facility’s use of oil, natural gas, and coal does not exceed, in the aggregate, 25%.⁴⁹ But this classification was only mentioned in the promulgation of the Dual Use Equipment rule when Treasury expressly rejected usage of FERC classifications to determine the extent of property’s ITC eligibility.⁵⁰

Even if appropriate to look to FERC standards, it should be noted that FERC’s rules are focused on fuel usage. The Congressional conference report explaining the FERC regulations even acknowledged drawbacks, stating that, “The language in these definitions relating to fuel use and fuel efficiency may not always be applicable as som [sic] power production facilities (such as hydroelectric facilities) may not use fuel.”⁵¹ Electricity from the grid is increasingly an energy input in the context of energy storage devices paired with renewable energy, but FERC’s regulations are silent on grid energy. A battery charging and discharging grid energy would not render an otherwise qualifying solar facility as ineligible for classification as a qualifying small power production facility, supporting a conclusion that such an input should not even be included in the calculation of non-qualifying sources at the outset.

Generally, FERC’s classifications primarily concern special rate and regulatory treatment in utility proceedings and have no foundation in the statutory or legislative intent evidenced by Congress with respect to the extent of ITC eligibility for equipment that uses multiple sources of energy. Even if the Dual Use Equipment rule was originally drafted in pursuit of regulatory symmetry with utility oversight, many

⁴⁶ 51 FR 44315-01, supra note 41.

⁴⁷ IRC § 25D(d)(2).

⁴⁸ 52 FR 27336-01, supra note 6.

⁴⁹ 18 CFR § 292.204(b). Any primary energy source which, on the basis of its energy content, is 50 percent or more biomass shall be considered biomass. 18 CFR § 292.204(b)(ii).

⁵⁰ 52 FR 27336-01, supra note 6.

⁵¹ H.R. Cof. Rep. 95-1750, 89, 1978 U.S.C.C.A.N. 7797, 7823.

solar energy systems today (especially residential and commercial rooftop systems) are not even regulated by FERC as qualifying small power production facilities.

SEIA therefore requests that future Treasury regulations concerning Dual Use Equipment should eliminate the 75% Cliff as a threshold eligibility requirement. At a minimum, respecting credit eligibility to the extent of basis or cost allocable to the equipment's use of energy from qualifying resources during an annual measuring period would be consistent with precedent established within the IRC section 38 general business credit rules, generally, and other investment credits.

III. Confirm Taxpayers May Aggregate Qualifying Energy Sources in Basis Calculation

In the event that the 75% Cliff (or smaller) is retained, the new regulations should make clear that the taxpayer's calculation of qualifying ITC basis shall allow the taxpayer to combine all energy inputs that would otherwise individually qualify for the ITC, including technologies eligible for the production tax credit ("PTC") under IRC section 45 if the ITC is properly elected in lieu of the PTC under IRC section 48(a)(5).

Congressional report language strongly suggests that multiple credit-eligible technologies could "supplement one another" in the provision of usable energy.⁵² Treasury's preamble to the original 75% Cliff refers to measuring "qualified sources" to satisfy input requirements, providing that multiple qualifying inputs (e.g., solar and wind energy used by the same equipment) should be aggregated for purposes of calculating dual use equipment's qualifying basis.⁵³

Yet current regulations specifically applied to solar, wind, and geothermal technologies suggest a different standard.

For example, if a battery's usage as measured by inputs is 50% geothermal and 50% solar, does the cost of the battery qualify for the ITC? Under Treasury definitions, the battery is likely Dual Use Equipment. The regulations apply a separate Dual Use Equipment rule to each technology and require each technology to meet the 75% Cliff separately. In other words, an aggregation of solar and geothermal inputs for purposes of satisfying the 75% Cliff is prohibited. The 50% geothermal and 50% solar input battery example would therefore be completely ineligible for the ITC, despite the fact that geothermal and solar are individually eligible for the credit. With respect to the extent of basis that is ITC eligible, the regulations appear inconsistent on their face:

- Solar Energy at Treas. Reg. section 1.48-9(d)(6): "only to the extent of its basis of [sic] cost allocable to its use of solar or wind energy" (emphasis added).
- Wind Energy at Treas. Reg. section 1.48-9(e)(1): "only to the extent of its basis or cost allocable to its use of wind energy" (emphasis added).
- Geothermal Energy at Treas. Reg. section 1.48-9(c)(10)(iv): "only to the extent of its basis or cost allocable to its use of energy from a geothermal deposit" (emphasis added).

Growing consumer and regulatory interest in micro-grids and community/shared renewable energy projects illustrate scenarios in which equipment may involve multiple renewable energy sources, in addition to other energy sources. New Dual Use Equipment regulations should more clearly reflect Congressional intent and make clear that measurement of qualifying energy sources may aggregate all energy inputs that individually would qualify for the ITC, including technologies eligible for the PTC that claim the ITC in lieu of PTC.

⁵² H.R. Rep. No. 95-496, supra note 34.

⁵³ 51 FR 44315-01, supra note 41.

IV. *New Technologies and Business Models Create Practical Challenges to Applying Current Dual Use Equipment Rule*

Treasury regulations provide for an annual measurement of energy inputs on a British Thermal Unit (“BTU”) basis, but no additional clarity is provided with respect to measurement methodology. The emphasis on thermal systems and the singling out of a method based on a BTU basis is not surprising with respect to solar, as the dominant solar technology in the market during the time the regulations were written was solar thermal technology providing hot water. PV systems were still too expensive except for limited, remote off-grid installations and spacecraft. The regulations clearly indicate electric storage devices for solar and wind energy systems are eligible, but the drafters of the Dual Use Equipment rule provided no corresponding example for determining eligible basis.

The Treasury notice in 1987 announcing the final Dual Use Equipment rule emphasized energy input measurements on a “BTU basis,” but also included language that the IRS “may accept any other method that, in [the IRS Commissioner’s] opinion, accurately establishes the relative annual use of energy from qualified sources and energy from other sources” (emphasis added).⁵⁴ Treasury acknowledged in its notice that other measurement methods may be acceptable, including methods that do not “reflect actual, relative energy inputs” but provided no examples of other acceptable methodologies.⁵⁵

Very few authorities apply the Dual Use Equipment rules to specific case facts. At the outset, one must determine the level at which one must carry out measurements of energy inputs, assuming that method is adopted. In the only case to explore the 75% Cliff in any depth, the Tax Court declined to endorse an IRS position that analyses must be completed for individual assets:

Nowhere do we find the regulations requiring that a separate energy use study be made as to each asset. The purpose of the [tax credit] is to encourage the use of alternative sources of energy and thereby to reduce the country’s dependence on traditional forms of energy. S. Rept. 95-529 (1977), 1978-3 C.B. (Vol. 2) 199, 205. In the instant case, [The agricultural facility] derives 81.9 percent of its energy from geothermal energy. [The facility] was built at the...site because geothermal energy was available. Thus, while [the facility] uses propane and electricity in its facility, it has met the requirements of the regulations set out above, and it satisfies the purposes of the statute.⁵⁶

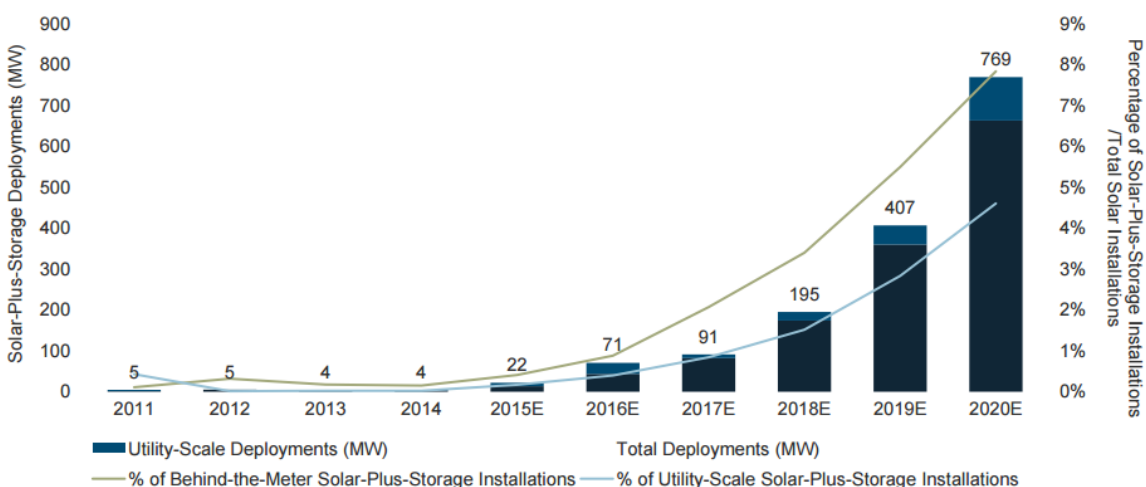
Technical complexity has only increased in the energy storage context. For example, technological innovations have made it easier to pair solar panels with batteries through shared system property like inverters and other wiring connecting the system to the host customer and the electric grid. Current market projections suggest these configurations will rapidly increase over the next five years, experiencing nearly 35x growth in deployed capacity from 2015. By 2020, nearly 1 in 10 solar installations in the United States will include an energy storage device. Storage is projected to be especially popular in behind-the-meter installations.

⁵⁴ 52 FR 27336-01, supra note 6 (emphasis added).

⁵⁵ Id.

⁵⁶ Oregon Trail Mushroom Co. v. Comm’r, TC Memo 1992-293.

Projected Solar-Plus-Storage Installations
 Source: GTM Research



The current Dual Use Equipment rule provides little clarity for electric storage and market applications like behind-the-meter where measurement of gross energy inputs is difficult or even technically impossible. Certain grid-connected, behind-the-meter solar+storage projects in residential and commercial settings may feature equipment that provides for the simultaneous flow of electrons between the PV panels, the host customer, a battery, and the electric grid. Indeed, grid synchronization by definition requires electrons to be constantly flowing. It is therefore impossible to “tag” electrons on a real-time basis as qualifying or non-qualifying, yet the current regulations appear to require this level of precision. In such configurations, a battery may receive an automated command from the grid operator to charge the battery during the day when solar panels are generating electricity and the host customer is consuming electricity. At such moment, the electricity from the solar panels may reach the host customer, be stored in the battery, or be exported to the grid via net metering. The battery’s energy charging could be comprised of solar electrons, grid electrons, or some combination of the two sources that is impossible to measure with precision. Standard interconnection practices would only require one utility meter to monitor the net exchange of electricity between the grid and the customer’s site.

Even assuming the taxpayer added a second meter to record the aggregate electricity that could be generated by the PV panels alone, real-time energy flows and overlapping equipment use makes it virtually impossible to guarantee the precise allocation of energy usage between solar and non-solar energy sources at all times. At the same time, such innovations in technology allow a host customer to lower the overall capital expenditure, increase his/her use of clean energy, obtain an emergency back-up power capability when the grid is down, and provide critical grid-balancing services when the grid is operating normally.

V. Modernizing Dual Use Equipment Rule with Primary Use Standard for Full ITC Eligibility

Notwithstanding the incremental regulatory improvements described herein that could improve the administration of existing tax regulations, the legislative history suggests a flexible standard for taxpayers is appropriate as long as the primary use or activity of the Dual Use Equipment derives from solar energy.

The “primary use” standard is applied for asset class depreciation determinations, changes in use, and for asset disposition purposes applying a similar logic with regard to Dual Use Equipment. SEIA proposes Treasury adopt a similar “primary use” standard for Dual Use Equipment for IRC section 48 purposes.

Specifically, the primary use standard should incorporate the following elements to provide both flexibility and specificity to taxpayers:

1. A flexible provision whereby dual use equipment may be 100% eligible for the ITC provided the primary use of the equipment for depreciation purposes is as otherwise eligible solar energy property.
2. Primary use would be determined in the identical manner in which the taxpayer would determine the primary use of the asset when determining the appropriate class life for depreciation schedule purposes.
3. Specific scenarios for which primary use will be deemed solar energy, providing both taxpayers and tax professionals greater certainty with respect to eligibility.

The above principles are illustrated in our proposed language below, which would be a substitute for the current Dual Use Equipment rules. The proposed example is focused on solar only, but SEIA reiterates its proposal on page 14 that the new regulations should confirm that all ITC-eligible technologies' energy inputs may be aggregated and included for purposes of calculating the extent of ITC-eligible basis.

SEIA's Proposal Language for New Treas. Reg. section 1.48-9(d)

(6) Dual Use Equipment.

(i) Solar energy property does not include equipment ("auxiliary equipment"), such as furnaces and hot water heaters, that use a source of power other than solar energy to provide usable energy.

(ii) Solar energy property includes equipment, such as ducts and storage devices (e.g., batteries), which is used by both auxiliary equipment and solar energy equipment ("dual use equipment").

(iii) Dual use equipment is qualifying solar energy property if the primary use of the equipment for purposes of section 167(a) is as equipment or material (and parts related to the functioning of such equipment) that uses solar energy. In general, primary use may be determined by the taxpayer in any reasonable manner that is consistently applied to the dual use equipment. Solely for purposes of this section, dual use equipment will be deemed to primarily use solar energy if:

- (1) the dual use equipment allows the taxpayer to use solar energy when local utility service is unavailable; or*
- (2) to the extent energy inputs are allocable to solar energy and energy from other sources, at least 50 percent of the allocable energy inputs used by such dual use equipment in an annual measuring period is solar energy.*

(iv) An "annual measuring period" for an item of dual use equipment is the 365-day period beginning with the day it is placed in service or a 365-day period beginning the day after the last day of the immediately preceding annual measuring period. The allocation of energy use required for purposes of this section may be made by comparing, on a Btu or kilowatt hour basis, the energy input to dual use equipment from solar energy with energy input from other sources.

(v) (A) If the dual use equipment is not primarily used for solar energy as described in paragraph (iii), dual use equipment is only solar energy property to the extent of the equipment's cost or basis allocable to use of solar energy during an annual measuring period; and

(B) No additional credit is allowable for dual use equipment upon which the taxpayer has already claimed a tax credit if, in any subsequent taxable year, the portion of such dual use equipment's basis or cost allocable to use of solar energy increases above what the taxpayer originally determined when placing the property in service and calculating the corresponding credit for such dual use equipment. If a taxpayer's use of solar energy in an annual measuring period decreases below what the taxpayer originally determined as the allowable portion for purposes of clause (A) when placing the property in service, however, the taxpayer will be subject to recapture in the taxable year in which such annual measuring period closes for the proportional amount of the

credit claimed on the dual use equipment that would have otherwise vested in such annual measuring period.

SEIA's proposal provides the taxpayer the flexibility to determine primary use in any reasonable manner that is consistently applied to the Dual Use Equipment. Such a determination would provide policy parity with the residential ITC under IRC section 25D, where 100% of basis is nonetheless eligible for the ITC even if measurement of energy inputs is less than 100% solar energy. Considering the legislative history of the business credit suggests an even less restrictive standard for eligibility of property that merely uses solar energy, SEIA believes the statutory language of IRC section 25D(d)(1) provides the most appropriate reflection of Congressional intent concerning the portion of basis of Dual Use Equipment that should be taken into account in computing the ITC.

Much like the current regulations, the taxpayer would make the primary use determination when placing the equipment in service. Thereafter, during the ITC recapture period, the taxpayer must re-assess the primary use of the equipment for each annual measuring period, just as the taxpayer must assess whether any asset's primary use has changed for purposes of depreciation under IRC section 168.⁵⁷

In the interest of clarity, SEIA proposes two specific fact scenarios in which primary use will be deemed solar energy.

The first scenario primarily concerns energy storage that provides the host with emergency back-up power. Current electrical codes require behind-the-meter solar projects to shut down when the electrical grid experiences an outage.⁵⁸ The rule is premised on safety concerns for electrical and utility workers to ensure solar arrays are not feeding electricity back onto utility lines while workers are trying to restore power. Solar-plus-storage projects can be configured to disconnect the host from the grid and allow the host to continue using solar energy stored in the storage device. Furthermore, a configuration can be implemented to provide a host with electricity in real-time during the day, when the sun is shining, and in evening hours when the host can draw from the storage device any excess electricity generated over the course of the day.

The host's consumption of solar energy for emergency power purposes may only occur over the actual duration of a grid blackout. But the storage device may retain stored solar energy 24 hours a day, seven days a week for weeks or months to be ready and available as soon as an outage occurs. Because storage is not just a function of energy inputs and outputs, but also a function of time in which the energy is stored, SEIA believes primary use should be deemed solar energy in light of the critical role that such Dual Use Equipment will play to enable a consumer to be able to use solar energy when it is needed most. This is also consistent with parallel public policy goals of ensuring individuals and communities become more resilient to extreme weather and other events that threaten or undermine U.S. utility infrastructure.

The second scenario provides the taxpayer with the option to use an energy inputs method for determining primary use. The proposed rule mirrors the 50% threshold for certain solar energy property under IRC section 25D to provide consistent policy treatment. SEIA agrees that at least 50% use of solar energy is one reasonable option to demonstrate primary use and should be available under IRC Section 48.

Clause (A) of paragraph (v) of the proposed language retains the underlying standard consistent with other parts of the Internal Revenue Code that removes a "cliff" for ITC eligibility and notes that Dual Use Equipment that does not primarily use solar energy may still be eligible for the ITC but only to the extent of basis allocable to the Dual Use Equipment's use of solar energy. To the extent some portion of the

⁵⁷ See Treas. Reg. section 1.168(i)-4(d)(2)(i).

⁵⁸ See UL Standard 1741.

basis cannot be reasonably allocated to qualifying and non-qualifying use, such portion of inputs would be removed from both the numerator and the denominator of the calculation.

Clause B of paragraph (v) attempts to better balance ITC recapture considerations for the taxpayer and IRS. Under the current rules, the taxpayer is subject to ITC recapture on proportional decreases in qualifying energy inputs in an annual measuring period. If qualifying energy usage increases, however, the taxpayer is prohibited from claiming additional credit. Under the proposed regulatory language, the taxpayer may not claim additional credit for any increase, but the taxpayer's recapture liability with respect to the Dual Use Equipment rule would be limited to the proportional amount of credit that would have vested in that taxable year. The application of this requirement can be illustrated in the following example:

Taxpayer's basis in Dual Use Equipment is \$100 when placed in service. 40% of energy inputs is expected to be attributable to solar, and taxpayer claims a 12% ITC on the cost basis of the Dual Use Equipment, vesting \$2.40 each year over the five-year recapture period. At the end of the first annual measuring period, the taxpayer's energy inputs measurement shows that only 35% was attributable to solar, which would have constituted a total ITC of \$10.50, vesting \$2.10 each year over five years. Therefore, the taxpayer's recapture at the close of the first annual measuring period is \$.30 ($\$2.40 - \$2.10 = \$.30$). If the solar energy percentage increases in the following annual measuring period, no additional credit may be claimed. Alternatively, if the solar energy percentage falls to 30% in year 2, the proportional recapture for that annual measuring period will be the difference between 40% and 30%, or \$.60 ($\$2.40 - \$1.80 = \$.60$).

The above recapture is not proposed as a replacement for otherwise applicable recapture requirements under IRC section 50 for qualifying solar energy property. For example, if the taxpayer were to sell or otherwise dispose of the dual use equipment in year 2, taxpayer would be subject to full recapture of the 80% of unvested credit.

Applying Integral Property and Primary Use Standard to Dual Function System Property

Certain solar energy property or components associated with such property may also serve an ancillary purpose. For example, solar shingles, solar glass, a solar parking lot structure (carport), or poles within a solar energy system may simultaneously serve another ancillary function. Recent private letter rulings ("PLR") have suggested that the taxpayer must allocate qualifying basis between the energy property and the non-energy function. There is no authority under current law for this position. Such property is distinguished from Dual Use Equipment by the fact that Dual Use Equipment concerns the use of qualified and non-qualified energy sources, whereas the property here is engaged in a qualifying activity and another ancillary non-energy function. Qualification of such property for the ITC should be based on whether such property is integral to the function of solar energy property or, alternatively, whether its "primary use" is to serve a solar energy function. That is, a unit of property may be 100% eligible for the ITC if the component is integral to the solar energy function even when such component part provides an ancillary non-energy function.

The following scenarios illustrated as examples are recurring issues for taxpayers in the solar energy sector.

Example #1 below is intended to address carports, farm implement parking structures, some bus stop shelters and other non-building commercial structures which serve the purpose of elevating the solar panels or other solar equipment to make the space beneath the structure useable. If the structure is more like a vertical or angled wall and the structure can also serve as a wind screen, water screen, or even visual or sound screen (like a wall to block the view of, or noise from, a highway), SEIA proposes that the structure be 100% ITC eligible as solar property, despite having another function.

Example #2 below is intended to cover solar “shingles,” solar awnings, solar mounted to or as a wall surface, non-passive solar windows (i.e., those that generate electricity), solar generating paints or other surface coatings of all types, including technology which may allow vehicles or pedestrian to drive or walk upon it while it generates electricity or heat, and which, though otherwise part of a building integrated or attached to land or other real property, was purchased or constructed and placed in service by the taxpayer for the primary use of generating electricity or heat from sunlight. This example is intended to apply to both current and future technology. Other roofing components serving solely a non-energy function that are not integrated into the process of generating electricity or heat from the sun, such as water-impervious underlayments like tar-paper, metal flashing, adhesive-backed asphalt sheeting, etc., should be considered part of the non-eligible building property.

I. Example #1

A simple and common example is a parking lot carport solar system. Urban landscapes often include large open surfaced parking lots. In order to make productive use of both the surface and the space above or beside the surface of such real property, a solar system must be elevated so that cars can continue to park under the solar system. Such an elevated solar array provides ancillary non-energy functionality shading the area where the cars are parked. Other features may also be added to provide security for the parking lot customers, such as security cameras or lighting. The structural supports for the elevated solar energy property is integral to the function of the solar equipment and should qualify 100% for the ITC. The fact that such structural supports are taller or longer than the supports for a ground mounted solar system should not disqualify any part of the cost of such supports. On the other hand, the security cameras and lighting do not serve a function that is integral to the solar energy property. Such equipment serving another function should not qualify for the ITC.

To elaborate further, because the solar energy generating property must remain directly exposed to sunlight and exposed to either overhead sky or oblique sunlight, and because the location and attachment of such equipment at surface level in most cases would preclude any meaningful other use of that same surface of the real property where such energy property is located, a taxpayer choosing to make use of its surface and also the above-surface real estate must be allowed to physically elevate the solar energy generating property in order to enable or reserve use of the space either currently, or for the future. Enabling such efficient economic use of a taxpayer’s real property encourages greater economic productivity, encourages capital investment and will generally increase taxable revenue.

On such facts, because the costs associated with elevation of the solar energy property are integral to and necessary for the operation of the energy generation or collecting equipment in a reliable and economically predictable manner, if such structure is engineered and designed to the specifications necessary for the safe and efficient functioning of the energy generation property, then the costs of such structure should be fully eligible as solar energy property.

The regulations should further make clear that such surface use beneath or beside such structure does not rise to the level of converting such structure as a structure for use as a dwelling unit for people and providing that one or more sides of the structure is not fully enclosed, and providing that such open side or sides remain exposed to the outdoors at all times and providing that there is no door or defined doorframe, then such structure does not meet the definition of a building or a structural component of a building and such structure may be fully eligible section 38 property and an integral part of otherwise eligible solar energy property.

Further, the fact that the depreciable or amortizable cost basis of that portion of the solar energy property that serves as the structural support for other solar energy property may equal or exceed the cost basis of the energy property that captures, converts, or stores the solar energy that is generated shall not disqualify such other tangible property costs from eligibility as section 38 property. Similarly, concrete pads that support a ground mounted inverter or other tangible property integral to and necessary for the intended function of the energy generation or otherwise eligible storage equipment, or subsurface wiring, or pilings and foundations necessary to mount upright supports for such structure should all be eligible for

the ITC to the extent directly necessary for the proper functioning and safety of the solar energy property directly or indirectly mounted to it.

II. Example #2

Taxpayer chooses to generate solar energy through the use of solar generating equipment which is capable of generating solar energy while directly or indirectly attached to a building or structural component of a building where such tangible property that generates such energy simultaneously serves a function as a roofing material, wall surface, awning, window surface, coating, pavement or other type of tangible property even in circumstances where, but for the fact that it generates solar energy, such tangible property would generally be depreciable or amortizable as non-ITC eligible property or as an improvement to land, including the surface of a sidewalk, road or pavement of any type.

Following the principles in Example #1, the mere fact that modern technology now enables use of daylight to generate solar energy on a land or building surface while allowing other uses of such surfaces should not require a taxpayer to trade eligibility of such costs for the ITC.

Therefore, if a taxpayer chooses to deploy equipment marketed to the taxpayer as a roofing shingle capable of generating solar energy, the fact that such device may be marketed as a roofing shingle by its vendors or roofing contractors or installers or other parties and the fact that such device may function independently as a roofing material in every other respect, the independent fact that such device is capable of functioning as a solar energy generating device requires that such device itself be 100% eligible as solar energy equipment eligible for the ITC and not as a structural component of a building such as a roofing shingle. Implicit in the definition of a roofing material or roof is the primary use of such materials as protection of the interior of the building or structure from weather, whereas, in the case of a material attached to a roof surface that also generates usable non-passive solar energy, such primary use of such property shall be deemed by the Commissioner as the generation of solar energy, with weather protection or climate control being an ancillary non-energy function not alone sufficient to warrant either ineligibility for the ITC nor a reduction in the amount of such credit.

Storage Devices Added to Existing, Operational Projects Should be Eligible for the ITC

Neither ITC nor ITC in lieu of PTC provisions and regulations preclude credit eligibility where qualifying property is added to energy property previously placed in service. That said, there is significant uncertainty in the marketplace today concerning the eligibility of a storage device integrated into an existing renewable energy system.

A private letter ruling concluded that a storage device will be considered part of the “qualified property” at a “qualified investment credit facility” within the meaning of IRC section 48(a)(5) and, therefore, eligible for the ITC in lieu of PTC. The taxpayer represented that it planned to install the storage device at a wind generation facility after the wind generation facility had been placed in service for federal income tax purposes. The ruling described the storage device’s “primary use” as storing the wind farm’s electricity to work around transmission constraints that had interfered with the taxpayer’s delivery of electricity to the grid. The storage device would enable the taxpayer to make best use of its electricity by storing the energy that would otherwise be wasted and delivering it to the grid at a later point in time. Furthermore, the addition of the storage device to the wind farm provided the taxpayer with new capabilities to use its wind energy, including the provision of ancillary services such as frequency regulation to compensate for grid instability caused by intermittent renewable generation like the taxpayer’s facility, and other causes of grid variability.⁵⁹

In the solar context, there are many scenarios in which solar energy equipment will be added to energy property for which an ITC has already been claimed. A taxpayer may add additional PV panels or other energy generation equipment to an existing project to expand generation capacity.

⁵⁹ PLR 201208035 (Feb. 24, 2012).

Following the five-year vestment period, the taxpayer may replace a degraded inverter or other power conditioning equipment with new equipment. In the case of solar water heating, the taxpayer may replace the water storage device with a new storage device. In each of these circumstances, it would follow that the new property integrated into the existing solar energy system is fully eligible for the ITC even though the unit of property has been originally placed in service at a later date in relation to when the balance of the other system property was originally placed in service for federal income tax purposes.

Even in the case of the IRC section 45 PTC, for which credit eligibility is determined on a facility-by-facility basis, there is precedent for system property additions to be deemed qualifying property for purposes of the energy credit even when placed in service after the initial credit-eligible property/facility is placed in service for federal income tax purposes.

Notice 2008-60, Notice 2009-52 and Notice 2013-29 are all consistent with the proposition that integral property may be “part of” a qualified facility under IRC section 45 even when it is placed in service at a date subsequent to the original placed-in-service date of the facility as a whole. The concept of determining the component property that is an “integral part” of a “qualified facility” for federal income tax purposes is best defined in the ITC regulations. Specifically, Treas. Reg. § 1.48-1(d)(4) states in pertinent part that “property [may be determined to be] used as an integral part of one of the specified activities if [such property] is used directly in the activity and is essential to the completeness of the activity.”

Notice 2008-60 specifically contemplates a case where property added to a facility is nonetheless treated as “part of the qualified facility” that is generating electricity from a qualifying resource for PTC purposes. Section 3.01 provides the example of a power plant using fossil fuel originally placed in service before October 22, 2004. After October 22, 2004, one new burner and boiler using open-loop biomass are added to the power plant. The new burner and boiler are connected to the existing steam header, turbine, and generator in the power plant. The open-loop biomass facility consists of the entire power plant that is operated as a separate integrated unit and includes both the existing power plant and the new burner and boiler. As the new additions failed to meet the so-called “80/20 Test” on a facility-wide basis, the additions were not treated as the placement in service of a “new” facility. Nonetheless, the power generated by the new additions were treated as eligible for the IRC section 45 PTC for the remainder of the tax credit period. Accordingly, the new additions would constitute “qualified property” that is part of a “qualified investment credit facility” within the meaning of IRC section 48(a)(5) and, potentially eligible for the ITC in lieu of PTC to the extent that the taxpayer has not previously claimed the PTC with respect to the facility.

Notice 2009-52 provides guidance with respect to the applicable procedures for electing to treat a “qualified facility” IRC section 45(d) as a “qualified investment credit facility” under IRC section 48(a)(5). Section 2.01 of the Notice provides in pertinent part: “[t]o make the election with respect to a qualified facility, a taxpayer must claim the energy credit with respect to qualified property that is an integral part of the facility on a completed Form 3468 and file such form with the taxpayer’s income tax return for the year in which the property is placed in service.”

SEIA believes that a storage device added to an existing renewable energy project may be eligible for the ITC under the “integral part” rule, because the storage device may be used directly in the activity of producing electricity from the renewable sources in a manner that enables the taxpayer to use the energy when needed, and thus, the storage device may be considered essential to the completeness of such activity.

Storage Devices Should Not be Rendered Ineligible for the ITC due to Separate Ownership of the Storage Device Relative to Other System Property

Third-party ownership of energy property has contributed to the rapid growth of new technologies, notably renewable energy technologies under IRC sections 48 and 45. In many cases, the taxpayer/owner of the

qualifying property is separate from the end user of the electricity. But as innovations continue, companies are further specializing in the provision of specific services and specific units of property that enable the qualifying activity. For example, some companies may provide individual inverters and/or storage devices through a services agreement to a solar project developer who will, in turn, sell renewable energy and emergency back-up power to an end-user. Conceptually, the relationship is similar to a sub-contractor, but whose equipment and services will be necessary for the ongoing operation of the developer's system to provide electricity to the end-consumer. From a policy perspective, the division of ownership between taxpayers should not alter the ITC eligibility of such equipment, provided the taxpayers are otherwise eligible to claim the ITC. Project developers already fully account for ITC-eligible equipment and expenditures, and separate ownership alone creates no additional risk of abuse. Future regulations should more clearly affirm what we believe can already be inferred from the tax law precedent:

- There is nothing inherent to IRC sections 48 that would prohibit property owned by multiple parties from being ITC-eligible.
- Parties should be eligible for ITC to the extent of their proportionate ownership interest in such property.

In Cooper v. Comm'r, a group of investors purchased packages of system property that would form the majority, but not all, of the property comprising the solar water heating systems. Each package was then leased by the investors to a separate taxpayer who, in turn, would sub-lease solar water heating systems to individual homeowners. The original lessee purchased and retained ownership of additional system property not included in the package, including a storage device, miscellaneous piping, fittings, insulation, and other small devices. The Tax Court noted that the investors' solar water heating equipment did not constitute a working solar water heating system without the storage device and other system property owned by the lessee. In upholding the taxpayers' credits claimed on their solar water heating equipment, the Tax Court found both the regulations and statutory definitions "sufficiently broad" to conclude that separate units of property constituting solar energy property are individually eligible for the ITC and expressly rejected the contention that ITC eligibility, with respect to an individual taxpayer, is dependent on that individual taxpayer owning a complete system:

Those regulations provide that the term 'solar energy property' includes equipment and materials *and parts solely related to the functioning of such equipment* that use solar energy directly to generate electricity, heat or cool a building or provide hot water for use within a building. Section 1.48-9(d)(1), Income Tax Regs. Equipment specifically mentioned in the regulations includes collectors, storage tanks, rockbeds, thermostats and heat exchangers; none of these items alone, or in combination with each other, would constitute a completely functional solar heating system. Clearly, under the regulations, petitioners' equipment would qualify as 'energy property'; respondent's position that petitioners' property did not so qualify is inconsistent with his own regulation. Further, we think that the statutory definition of a solar water property is sufficiently broad to include the component parts of a solar water heating system, and is not limited to a completely functional system as a whole.⁶⁰

The same conclusion follows, therefore, with respect to the definition of qualifying solar energy property. New regulations should confirm individual units of property that have been established as constituting energy property that would otherwise be eligible for the ITC will be respected as credit-eligible even when the property constituting a fully functioning system may be owned by separate taxpayers.

The IRS has already indicated that separate ownership of qualifying energy property should not preclude credit eligibility, even in the case of system property owned by separate taxpayers. In PLR 201536017, the IRS concluded that an individual taxpayer could claim the homeowner's solar ITC under IRC section

⁶⁰ Cooper v. C.I.R., 88 T.C. 84, 116-17 (1987) (emphasis in the original).

25D on expenditures to purchase individual solar PV panels installed in a ground-mounted, off-site solar project.⁶¹ The panels were installed with other PV panels owned by other unrelated taxpayers as part of a 'community solar' project in which a utility would credit to each participating taxpayer an amount of electricity from a single centrally-located solar array attributable to each taxpayer's respective PV panels. Each taxpayer owned panels outright, and each taxpayer was also allocated "partial ownership in racking equipment, inverter equipment, and wiring and other equipment and installation services required for the integration of the panels in the array and the interconnection of the array to [the] Public Utility's electric distribution system."

The taxpayer and each of the other owners of the solar panels included in the array were members of a special purpose limited liability company ("LLC"), but the LLC did "not hold any ownership interest in Taxpayer's panels, the array, or any of the related equipment or wiring." The LLC was formed solely to "represent the common interests of its members in managing certain administrative and financial matters in connection with ownership of the panels included in the array" as well as communicating with the utility "to calculate the net metering credit allocable to Taxpayer's and the other owners' respective Public Utility accounts."

Thus, the separate units of tangible personal property constituting the qualifying activity were divided between multiple unrelated taxpayers. Each taxpayer's proportionate ownership interest in PV panels and equipment could not on its own constitute an operational solar project. The qualifying activity depended on the installation and operation of system property owned by multiple taxpayers. And despite separate ownership, the IRS concluded that each taxpayer's expenditures for the PV panels, related equipment, and installation services were consistent with the statutory intent underlying the solar ITC and therefore constituted a "qualified solar electric property expenditure" under IRC section 25D(d)(2). The taxpayer was permitted to claim the full 30% ITC on expenditures related to his/her PV panels, equipment, and installation costs.

New regulations under IRC section 48 should affirm this position for the definition of energy property under IRC section 48.

There is ample tax precedent that the separate ownership of integrated system property should not in and of itself change such property's tax classification. In Samis v. Comm'r, the court held that the taxpayers' "total energy plant" which supplied domestic hot water, heating and air conditioning to an apartment complex in which they did not have an interest, was a structural component of the complex. The court stated that, despite the separate ownership of the energy plant and the apartment complex, the plant must be classified as a structural component of a building. The Court noted:

Bearing in mind the basic objective which Congress sought to achieve by means of the investment credit...the separate ownership of the energy plant in the present circumstances is wholly irrelevant.⁶²

Further guidance indicating that multi-party ownership of ITC-eligible property is permissible includes Rev. Rul. 78-268 and a private letter ruling. Rev. Rul. 78-268 addressed a fact pattern involving two investor-owned utilities, a tax-exempt cooperative, and a tax-exempt municipally-owned utility sharing a common tenancy in an electric generating facility. As enacted in 1978, IRC section 48(a)(4) effectively stated that property owned by a tax-exempt entity could not be ITC property. The issue was whether ownership by the tax-exempt entities disqualified the entire electric generating facility for purposes of ITC. The government held in Rev. Rul. 78-268 that the two investor-owned utilities were eligible for the ITC despite

⁶¹ PLR 201536017 (Sept. 4, 2015).

⁶² Samis v. Comm'r of Internal Revenue, 76 T.C. 609, footnote 6 at 623 (1981). See also Rev. Rul. 83-146, (taxpayer's ownership of property "does not affect [its] classification as tangible personal property or structural components.") and Rev. Rul. 67-359 (air conditioning units installed by a lessee of a building function as a central air conditioning system and are structural components of a building and ownership of the units by a taxpayer other than the building owner does not affect their classification).

the fact the electric generating facility was not ITC-eligible property in the hands of the tax-exempt entities. The ruling states that its holding applies whether an election out of Subchapter K rules has been made or not and whether the parties involved are a partnership or tenants in common. Rev. Rul. 78-268 has been interpreted by subsequent cases and IRS rulings⁶³ as standing for the proposition that fractional interests in common tenancies should be treated as separate assets for federal income tax purposes.

PLR 8341057 concluded that parties holding tenancy in common may elect separate depreciation methods for their respective ownership shares where one of the parties is restricted to straight-line depreciation.⁶⁴

GCM 39142 addressed a fact pattern involving a public corporation that was an instrumentality of a state ("Public Corporation") that issued industrial development bonds in order to raise capital to lend capital to an investor-owned utility for the construction of an electricity-generating facility. As enacted in 1984, IRC section 103 provided that the interest on an industrial development bond is excludible from gross income if the proceeds from the bonds are used to provide facilities for the "local furnishing of electricity energy or gas." A facility furnishing "local" electricity was defined as one that provided electricity needs within one contiguous county (or metropolitan area). The utility shared a tenancy in common with certain other utility companies. The facility itself generated electricity to serve two counties, but Utility used its tenancy in common interest to serve only a single county. The primary issue was whether the utility's use of the bond proceeds should be treated as "local furnishing of electricity." To assess the primary issue, the memorandum analyzed whether the entire facility's service of two counties meant that none of the tenants in common would be treated as providing "local furnishing of electricity" and whether the fact that the utility used its share of tenancy in common ownership to serve only one county allowed the utility to fulfill the "local furnishing of electricity" requirement.⁶⁵

The general counsel memorandum further evaluated the applicability of Rev. Rul. 78-268 and whether the ruling dictated that a taxpayer's percentage of a tenancy in common interest constituted a separate asset for purpose of the "local furnishing of electricity" test. The memorandum advised that the facility does not qualify for IRC section 103 exemption as the facility as a whole served two counties. The memorandum distinguished Rev. Rul. 78-268, indicating that Rev. Rul. 78-268 addressed a case where the federal income tax treatment was a function of the relationship between the taxpayer and the property, but that the federal income tax treatment of the fact pattern in the memorandum was a function of the nature of the property itself and not the taxpayer's relationship to the property.

Finally, Treasury and IRS had to address of the issue of multiple owners when interpreting the American Recovery & Reinvestment Act of 2009 ("ARRA") statute for the 1603 Program and concluded that the statute allowed taxpayers owning different portions of a "qualified facility" to claim cash payments despite the statutory language that inextricably links IRC section 45(e)(3) and IRC section 45(a) for PTC purposes. In other words, the definition of a "qualified facility" under IRC section 45(d) for 1603 Program purposes is not confined to a single taxpayer that would otherwise be eligible to claim PTCs, because the definition of specified energy property did not incorporate the provisions of IRC section 45(a) or IRC section 45(e)(3). The Frequently Asked Questions and Answers document issued with respect to the 1603 Program supports multi-owner eligibility in the context the 1603 Program.⁶⁶ Specifically, FAQ #34 illustrates a facility eligible for a payment under the 1603 Program that is owned by more than one party:

34. Question: In the case of a qualified facility that produces electricity by burning gases or liquids derived from a qualified energy resource such as open-loop biomass

⁶³ See, e.g., PLR 8341057 (July 14, 1983); GCM 39142 (Jun. 24, 1983).

⁶⁴ PLR 8341057 (Jul. 14, 1983).

⁶⁵ GCM 39142 (Jun. 24, 1983).

⁶⁶ U.S. Treasury Dep't of the Fiscal Asst. Sec'y, Payment for Specified Energy Property in Lieu of Tax Credits under the American Recovery and Reinvestment Act of 2009, Frequently Asked Questions and Answers.

or municipal solid waste, can the equipment used to convert the qualified energy resource into a gas or liquid qualify for a Section 1603 payment?

Answer: Yes, but only if the equipment used to produce the gas or liquid (the conversion equipment) is an integral part of the qualified facility. In general, conversion equipment that is owned by the same person and located at the same site as the qualified facility will be treated as an integral part of the facility. In addition, the conversion equipment may be treated as an integral part of the qualified facility, even if under different ownership or at a different site, if it is established that the conversion equipment is integrated into the facility. Factors that may be relevant in determining whether the conversion equipment is integrated into the facility include whether the conversion equipment and the facility are placed in service simultaneously, the extent to which the gas or liquid produced is dedicated to the facility (for example, under an exclusive long-term supply contract), and the dependence of the facility on the gas or liquid produced by the conversion equipment.

Moreover, FAQ #35 requires a separate application process in the case of separate ownership:

Question: If components of a facility are owned by different persons, must each owner submit a separate application for a Section 1603 payment?

Answer: Yes, a separate application must be submitted for each part of the facility with a different ownership structure. For example, if an open-loop biomass facility consists of conversion equipment owned by corporation X and generation equipment owned by corporation Y, X and Y must submit separate applications to receive Section 1603 payments for their portions of the facility. All owners of the facility (including owners of portions of the facility that are not eligible for a Section 1603 payment) must join in each separate application for the Section 1603 payment and agree to the terms and conditions, including the waiver of the right to claim a credit under section 45 with respect to the facility. In any such case, the application and the terms and conditions will be appropriately modified to reflect the participation of persons other than the claimant.

Although the 1603 Program guidance is not binding for ITC eligibility purposes, this guidance is grounded in and consistent with related tax law applicable to ITC and not simply a policy decision for purposes of administering the 1603 Program. ITC eligibility shares the same statutory pathway as 1603 Program eligibility. Even in the case of PTC technologies whose eligibility is assessed on a facility basis, both ITC and 1603 rules treat as eligible any “qualified property” determined to be part of a “qualified facility” under IRC section 48(a)(5)(D) and IRC section 45(d), respectively. The relevant statutory language for the 1603 Program is:

(d) SPECIFIED ENERGY PROPERTY. For purposes of this section, the term “specified energy property” means any of the following:

QUALIFIED FACILITIES. Any qualified property (as defined in section 48(a)(5)(D) of the Internal Revenue Code of 1986) which is part of a qualified facility (within the meaning of section 45 of such Code) described in paragraph (1), (2), (3), (4), (6), (7), (9), or (11) of section 45(d) of such Code.

There is no statutory basis for taking a different position regarding multiple owners for purposes of the ITC than under the 1603 Program.

Otherwise Qualifying Energy Property Should Not be Rendered Ineligible if System Property is Divided between the IRC Section 48 Credit and the IRC Section 25D Credit

Just as business models are evolving to include separate ownership of system property, other models are emerging in which system property may be divided between the ITC under IRC section 48 and the ITC under IRC section 25D. New regulations should clarify that otherwise qualifying energy property, such as storage devices, should not be rendered ineligible for the ITC where the system property is divided between the two solar investment tax credits.

Third-party ownership of storage with renewable energy is growing in popularity, but developers are also selling storage devices like batteries to consumers outright. In some cases, the installer may lease solar PV panels to an end-user at a residence or sell electricity from the system to the customer through a power purchase agreement (“PPA”). At the same time, the energy generation equipment may be paired with a battery that the customer purchased to enable the customer to use its fully functioning system during a grid outage.⁶⁷ In this example, ownership of ITC-eligible equipment is not only divided between separate owners, but the installer may be claiming the commercial solar ITC under IRC section 48 and the homeowner may claim the homeowner’s ITC under IRC section 25D.

The IRS has already established a similar position with respect to solar energy property used for both non-business and business purposes. In general, expenditures under IRC section 25D must be primarily for nonbusiness purposes (i.e., energy generation for use by the taxpayer at a residence). If a taxpayer uses property eligible for the IRC section 25D ITC solely for business purposes, the property will not qualify for the IRC section 25D ITC. If business use of the otherwise qualifying property is more than 20%, the taxpayer may claim the ITC but may only take into account that portion of the expenditures for the property that are properly allocable to use for nonbusiness purposes.

In Notice 2013-70, the IRS considered the example of a taxpayer who used the electricity at its residence but also sold more than a minimal amount of excess electricity to a utility. The IRS concluded the taxpayer may claim the IRC section 25D credit for the portion of the solar electric property expenditure that relates to the electricity generated for use in the taxpayer’s home, and, further, that taxpayer “may be able to claim the IRC section 48 credit for a portion of the solar electric property expenditure if the requirements of IRC section 48 are satisfied.”⁶⁸

Accordingly, new regulations should provide greater clarity and apply this position consistently to structures in which different energy credits are claimed on the generation and storage components, provided each taxpayer’s respective credit is limited to the property’s eligible basis for which each taxpayer is the owner for federal income tax purposes and no double benefit is provided with respect to eligible basis.

Conclusion

Thank you for the opportunity to provide comments on the proposed rule regarding the definition of qualified property for purposes of the energy credit under IRC section 48. SEIA looks forward to working with the IRS and Treasury to further clarify these issues as future regulations are considered.

⁶⁷ Some jurisdictions are considering residential demand charges that would require the homeowner to pay the utility for certain peak usage. A homeowner’s solar energy system with storage could also be used to increase output of distributed generation at specific points in time in order to avoid such demand charges. See e.g., Lehrman, Matt, “Are Residential Demand Charges the Next Big Thing in Electricity Rate Design?” Rocky Mountain Institute, May 21, 2015, available online at http://blog.rmi.org/blog_2015_05_21_residential_demand_charges_next_big_thing_in_electricity_rate_design.

⁶⁸ Notice 2013-70, “Q&A on Tax Credits for 25C and 25D” (Nov. 18, 2013).

Regards,

A handwritten signature in blue ink that reads "Rhone Resch". The signature is fluid and cursive, with the first name "Rhone" and last name "Resch" clearly distinguishable.

Rhone Resch
President & Chief Executive Officer
Solar Energy Industries Association

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