IRS and Treasury Release Notice on New Energy Credits Regulations
October 2, 2015

Introduction

On October 2, 2015, the U.S. Department of the Treasury (“Treasury”) and the Internal Revenue Service (“IRS”) issued Notice 2015-70 requesting comments from the public on future guidance related to the definition of qualifying energy property under section 48 of the Internal Revenue Code (“IRC”). The notice states that the Treasury and IRS “anticipate” the Government will issue new regulations to define certain types of property qualifying for the investment tax credit (“ITC”).

This article will describe the evolution of the ITC, information about the timing and scope of any potential future regulations, and potential issues that the Treasury and IRS may attempt to address in such guidance.

Request for Comments / Importance of Future Guidance to Energy Credits

Based upon prior history, it would be unusual for the Treasury and IRS to formally request public comments if new guidance was being considered in the form of another notice, revenue ruling or revenue procedure. Notice 2015-70 expressly notes the intention to update the current regulations under IRC section 48 that have not been revised since 1987. The IRS previously included potential updates in its annual Priority Guidance Plans over the last several years, however, those efforts were understood to be much smaller in scope. The 2015-2016 Priority Guidance Plan released by Treasury and IRS on July 31, 2015, included a new project listed as, “Guidance on the definition of qualifying energy property under §48.” Notice 2015-70 confirms the new project will likely result in new regulations.

Specifically, the Treasury and IRS request comments that address the following:
1. Whether only property that actually produces electricity may be considered energy property or whether property such as storage devices and power conditioning equipment may also be considered energy property.
2. Whether dual use property should qualify for the credit and, if so, under what circumstances it should qualify. If it should qualify, what portion of the basis of dual use property should be taken into account in computing the energy percentage.
3. Comprehensive definitions of the property described in Section 3 of the notice.
4. Definitions of terms such as storage devices, power conditioning equipment, transfer equipment, and other property commonly used in conjunction with property described in Section 3 of the notice, as well as definitions of parts related to the functioning of these items.
5. The need for other energy-related definitions.

The Treasury and IRS request that comments be submitted by February 16, 2016. Taxpayers will have just over four months to submit formal comments or meet with the Treasury and IRS to explain issues of importance in developing future regulations. After that comment period, attorneys from the Treasury and IRS will review those comments and determine the scope of future guidance.

The Treasury and IRS may first issue proposed regulations, a process that often takes significant time to draft, review and publish. Proposed regulations often take up to one year or even many years to issue. Although not as likely, it is also possible that the Treasury and IRS may issue temporary regulations that provide immediate guidance to taxpayers prior to the publishing of final regulations.
After proposed regulations are issued, taxpayers have another chance to formally comment prior to final regulations being published. Issuing final regulations may also take a significant amount of time.

Taxpayers may find it difficult to obtain Private Letter Rulings ("PLRs") while this regulation process is underway.

**Background/History of Section 48 and Energy Credits**

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 percent of capital spend) to the present-day ITC (30 or 10 percent of capital spend depending on the technology), frequent legislative changes have at times repealed and suspended the ITC, changed the amount of the credit and eligibility rules, and added and subtracted qualifying types of investment activities.\(^2\)

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

In 1981, the 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 property." 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 percent 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.\(^8\)

In the Energy Policy Act of 1992, Congress also created an inflation-adjusted tax credit of 1.5 cents per kilowatt-hour that may be claimed on electricity produced in the United States by a qualified facility.\(^9\) Today, this production tax credit ("PTC") under IRC section 45 may be claimed on facilities utilizing the

\(^4\) Treas. Reg. § 1.48-9, T.D. 7765, 46 FR 7287 (1/19/81).
following sources of energy: wind, closed-loop biomass, open-loop biomass, geothermal, landfill gas, municipal solid waste, qualified hydropower, and certain marine and hydrokinetic technologies, among others. PTCs may be claimed by the owner of the facility only on electricity generated and sold to unrelated persons for the first ten years after the facility is originally placed in service.

In the Energy Policy Act of 2005, Congress permitted additional renewable energy technologies to be eligible for the energy ITC under IRC section 48, allowing taxpayers to claim a tax credit equal to 30 percent of the cost basis of the qualified property or facility in the year in which such property is placed in service.

In the wake of the financial crisis of 2008, significant economic losses rendered tax credits less immediately valuable to energy project investors, and Congress responded by creating the Section 1603 Treasury Program: Payments for Specified Energy Property in Lieu of Tax Credits (the “1603 Grant Program”), which allowed a qualifying facility to claim a cash grant in lieu of the ITC and PTC. This legislation also modified the energy credits to permit qualified facilities under IRC section 45 to elect to claim a 30 percent ITC under section 48 in lieu of the PTC.

In early 2013, President Barack Obama signed into law legislation that retroactively extended the PTC and ITC in lieu of PTC as well as modified the deadline for placing into service certain technologies to a later date with a requirement to “begin construction” of a project rather than “place in service” the project.

On December 19, 2014, President Obama signed into law a last-minute, retroactive one-year extension of expired tax provisions known informally as “Tax Extenders.” Among the extended provisions were the PTC for wind and other qualifying renewable energy technologies under IRC section 45 and the ITC in lieu of PTC under IRC section 48.

Potential Topics to be Addressed in Future Regulations

The issuance of new regulations may open the door to significant changes to the ITC, or at least clarifications of long-standing areas of ambiguity. All technologies that are currently eligible to receive an ITC are likely to be impacted by new guidance, including solar, wind, geothermal, biomass, waste, hydropower, combined heat and power, fuel cells, microturbines, and others.

As previously noted, the regulations that defined energy property eligible for the ITC have not been updated since the 1980s. Old ITC regulations and the current IRC section 48 energy ITC statute present a number of inconsistencies, contradictions, and out-of-date examples that call into question the validity and authority of these old regulations relative to more recent statutory modifications by Congress and modern technologies.

The following are examples of issues that repeatedly emerge for taxpayers and practitioners. This is not an exhaustive list, but rather an illustration of the potentially broad scope for future regulations:

Issues Impacting Multiple Industries

---

10 Section 45 reduces by one-half the value of the credit for open-loop biomass, small irrigation power, landfill gas, municipal solid waste, qualified hydropower, and certain marine and hydrokinetic technologies. IRC § 45(b)(4)(A).
11 IRC § 45(a). Electricity sold between members of an affiliated group of corporations filing a consolidated return is not considered sold to a related party for this purpose in certain situations. IRC § 45(e)(4).
14 ARRA at sections 1102 and 1104: IRC § 48(a)(5).
15 American Taxpayer Relief Act of 2012, Pub. L. No. 112-240, 126 Stat. 2313 ("ATRA") (prior to enactment, PTCs and the ITC in lieu of PTCs were not available for a qualified wind facility unless the facility had been placed in service before the end of 2012).
17 Id. at section 155.
New Technologies

Battery Storage: the old IRC section 48 regulations contemplated “storage devices” but language and examples largely focus on thermal storage. This results in many open questions with respect to electric/battery storage paired with energy sources like solar and wind, which is much more common today.

Other industries have introduced new technologies into the market that are not well-defined in the regulations. For example, the regulations do not define terms and components of combined heat and power systems, fuel cells or microturbines.

Dual Use Property and Dual Function Allocations

The regulations often require that all or a portion of the ITC be reduced to the extent that the qualifying energy property performs another function and/or uses a non-qualifying source of energy. For example, the regulations provide limited guidance with respect to structural components that may support qualifying energy property while simultaneously serving another purpose (e.g., a building roof, carport, or lightpole). The regulations do not provide clear methodologies for allocating basis between the qualifying activity and the non-qualifying activity.

With respect to the use of non-qualifying sources of energy, “dual use property” rules for solar, wind, and geothermal energy create a percentage threshold for energy inputs in order to remain eligible. Specifically, dual use property is qualifying energy property (i) only if its use of energy from sources other than the qualifying energy source does not exceed 25 percent of its total energy input in an annual measuring period and (ii) only to the extent of its basis of cost allocable to its use of the qualifying energy source during an annual measuring period. At the outset, the dual use property rules and examples primarily contemplate thermal energy applications that are not easily applied to electricity.

Application of the dual use property rules to energy storage has been particularly unclear over the last several years. In 2011, the IRS issued two PLRs permitting taxpayers to claim a full 30 percent ITC on the eligible basis of storage devices paired with wind farms. Both taxpayers contemplated using storage devices for grid services like frequency regulation, in which a certain portion of battery inputs of electricity would be from the grid. Nonetheless, the IRS did not apply the dual use property rules and require a corresponding ITC haircut. In 2012, the IRS issued a PLR for a combined solar photovoltaic ("PV") and battery system that concluded a taxpayer must apply a haircut to the ITC claimed on a storage device in cases where the storage device is charged with solar and non-solar energy (e.g., grid power). In these cases, the IRS deemed such components dual use property under Treas. Reg. section 1.48-9(d)(6) and determined that such equipment is solar energy property (i) only if its use of energy from sources other than solar energy does not exceed 25 percent of its total energy input in an annual measuring period and (ii) only to the extent of its basis of cost allocable to its use of solar energy during an annual measuring period.

The annual measurement is required each year during the ITC’s five-year recapture period. If the annual measurement percentage attributable to the qualifying energy source in a given year drops in the subsequent year, then a proportionate share of the ITC must be recaptured. Additional credit may not be claimed if the annual measurement percentage increases in a subsequent year.

Treasury regulations provide for an annual measurement of energy inputs on a BTU basis, but no additional clarity is provided for electric storage and market applications where measurement of gross energy inputs is difficult or technically impossible (e.g., certain behind-the-meter configurations). The regulations do note that the IRS may accept any method that, in its opinion, accurately establishes the relative annual use by dual use equipment of the qualifying energy source and energy derived from

---

18 IRS PLR 201142005; 201208035.
19 IRS PLR 201308005.
other sources. In crafting the dual use property provisions in 1987, Treasury acknowledged other measurement methods may be acceptable, including methods that do not reflect actual, relative energy inputs.

**Structural Components**

Treas. Reg. section 1.48-1(e) provides that buildings and structural components do not qualify as ITC-eligible property. However, Treas. Reg. section 1.48-9(b) provides that structural components of a building may qualify for the ITC.

**Shared/Separate Ownership of Components**

Multiple taxpayers may wish to own specific components of tangible personal property that together comprise qualifying energy property or a qualified facility. Regulations are silent on the extent to which taxpayers’ property will be respected as qualifying energy property. An example would be Taxpayer A that owns rooftop solar photovoltaic (“PV”) panels and Taxpayer B that owns the inverter and remaining balance-of-system components necessary for the PV panels to deliver electricity to the customer and/or utility grid. The IRS just recently accepted the concept of separate or shared ownership in a PLR on community solar for a taxpayer claiming a similar ITC under IRC section 25D and Treasury has done so in the past in the 1603 Grant Program.\(^{20}\) In some cases, separately-owned property may be functionally interdependent, whereas the property in other cases may only be integral.

**Comprehensive Energy-Related Definitions**

**Solar**

Solar energy property is defined in Treas. Reg. section 1.48-9(d) including the eligibility of certain equipment and components for the ITC. The solar technology described in this regulation is dated and the industry would benefit from additional guidance. For example:

- IRC section 48(a)(3)(A)(i) provides that solar process heat is eligible for the ITC, however, Treas. Reg. section 1.48-9(d)(7) specifically provides that solar process heat does not qualify as solar energy.
- Questions frequently arise in the solar industry regarding the eligibility of fencing and land improvements (e.g., roads) built as part of a solar energy project, but the regulations are silent on the point.
- As mentioned previously, the eligibility and whether an allocation is required is a common question related to rooftops reinforced to support solar, solar carports and solar lightpoles.

**Combined Heat & Power**

Combined Heat & Power (“CHP”) System Property is described in IRC section 48(c)(3) and is eligible for a 10 percent ITC. No guidance or regulations exist to define terms in the statutory language or address how to perform specifically required calculations.

- The term “total useful energy” is not defined and questions exist in the industry as to whether a system’s parasitic load is considered in the 20 percent calculations.
- Various other issues relating the CHP system property are ripe for clarification including the performance of calculations at “normal operating rates” and how to measure the capacity limitations.

**Geothermal**

Geothermal Property is eligible for the 10 percent ITC as described in IRC section 48(a)(3)(A)(iii) and Treas. Reg. section 1.48-9(d)(10). No guidance exists on the interplay of geothermal property described

---

in IRC section 45(c)(4) and (d)(4) and the ability to claim a 30 percent ITC in lieu of the PTC under section 48(a)(5).

Other Energy-Related Definitions: IRC Section 48(a)(5) ITC in lieu of PTC

Notice 2015-70 is silent on the extent to which ITC regulations should be applied to IRC section 45 technologies that claim the ITC in lieu of PTC under IRC section 48(a)(5). Property described in IRC section 45(d) (i.e., wind, geothermal, biomass, trash, landfill gas, hydropower) was never defined on a component basis like technologies under IRC section 48 regulations, because the PTC is based on a source of energy used by a facility to produce electricity. Assuming a qualifying energy source is used, the specific components that comprise the facility are irrelevant to the actual computation of the credit. The intersection of PTC and ITC rules has created a number of uncertainties:

- Notice 2009-54 sets forth the procedure for electing the ITC, however its language may be read to have an unintended consequence of prohibiting taxpayers from claiming an ITC on property added to a facility already placed in service for which the taxpayer has claimed the ITC (e.g. new turbines added to an existing wind farm that claimed an ITC).
- The regulations do not clarify whether an ITC in lieu of PTC may be claimed on tangible personal property newly added to an existing facility for which a Section 1603 Treasury grant was previously claimed.
- The regulations do not clarify how tangible personal property may be integral to a facility and therefore qualify for the ITC in lieu of PTC.

Biomass

Section 3.01 of Notice 2008-60 provides that “a qualified open-loop biomass facility includes all burners and boilers (whether or not burning open-loop biomass), any handling and delivery equipment that supplies fuel directly to and is integrated with such burners and boilers, steam headers, turbines, generators, and all other depreciable property necessary to the production of electricity.” However, a “facility does not include (i) property used for the collection, processing, or storage of open-loop biomass before its use in the production of electricity, (ii) transformers or other property used in the transmission of electricity after its production, or (iii) ancillary site improvements, such as roadways and fencing, that are not necessary to the production of electricity. Each power plant that is operated as a separate integrated unit is treated as a separate facility for purposes of § 45(d)(3)” (emphasis added).

In electing the ITC in lieu of PTC, property that is an integral part of a qualified open-loop biomass facility should include certain property used for collection, processing, or storage of open-loop biomass. The 1603 Grant Program examined this issue and specifically concluded that “equipment used to convert the qualified energy resource into a gas or liquid” would be eligible a payment under the 1603 Grant Program. The key determination here is at what point does the production of electricity begin.

Qualifying open-loop biomass facilities under IRC section 45 may incorporate fossil fuel co-firing and remain eligible for the PTC, as long as co-firing is limited to the “minimum necessary” for startup and flame stabilization only. Therefore, as long as a taxpayer limits its facility’s consumption of fossil fuel to startup and flame stabilization purposes, the facility may remain a fully qualified open-loop biomass facility under IRC section 45. However, if the taxpayer elects to claim the ITC in lieu of PTC, it is unclear whether dual use property rules under ITC regulations for solar, wind and geothermal energy property should be applied and require a “haircut” corresponding to the biomass property’s percentage of fossil fuel consumption for startup and flame stabilization. It should be noted that Treasury concluded that a haircut was required for purposes of the 1603 Grant Program.

Trash Facilities

---

21 See 1603 Grant Program FAQs, Q34 (December 2011).
22 Id.; Notice 2008-60, I.R.B. 2008-30 at section 3.02(3).
A qualifying trash facility may be eligible for an ITC in lieu of PTC if it uses municipal solid waste to produce electricity.\textsuperscript{23} Municipal solid waste has the meaning given the term “solid waste” under section 2(27) of the Solid Waste Disposal Act (42 U.S.C. 6903).\textsuperscript{24}

Section 2(27) of the Solid Waste Disposal Act defines the term “solid waste” broadly to mean “any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under section 1342 of title 33, or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended.”\textsuperscript{25}

In addition to meeting the general definition of “solid waste” under the SWDA, it appears that further analysis is required to determine whether a material is “solid waste” under the SWDA successor statute, the Resource Conservation and Recovery Act (“RCRA”), and other EPA guidance, including various EPA regulations.\textsuperscript{26} As taxpayers lack guidance in the application of these provisions, many would benefit from updated guidance.

**Wind**

Property that uses wind to generate electricity under IRC section 45(d)(1) is eligible for an ITC in lieu of PTC under IRC section 48(a)(5). Treas. Reg. section 1.48-9(d)(8) defines wind energy property that is eligible for the ITC. Small wind energy property, however, is separately enumerated as eligible for the ITC under IRC section 48(c)(4). The applicability of the regulations’ definitions relating to wind energy property to small wind in IRC section 48(c)(4) and other wind facilities in IRC section 45(d)(1) is unclear.

**Conclusion**

Many issues are ripe to be addressed in new guidance, and new regulations would likely significantly impact renewable and other alternative energy projects. Industries that utilize the IRC section 48 ITC should carefully consider issues of importance and prepare to submit filings before the end of the comment period on February 16, 2016.

**Contacts**

If you have questions regarding the ITC, PTC, ITC in lieu of PTC, or other federal credits and incentives, please contact any of the following Deloitte Tax professionals.

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Email</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gary Hecimovich</td>
<td>Partner</td>
<td><a href="mailto:ghecimovich@deloitte.com">ghecimovich@deloitte.com</a></td>
<td>(202) 879-4936</td>
</tr>
<tr>
<td>Brian Americus</td>
<td>Senior Manager</td>
<td><a href="mailto:bamericus@deloitte.com">bamericus@deloitte.com</a></td>
<td>(202) 220-2022</td>
</tr>
<tr>
<td>Joel Meister</td>
<td>Manager</td>
<td><a href="mailto:jmeister@deloitte.com">jmeister@deloitte.com</a></td>
<td>(202) 220-2096</td>
</tr>
</tbody>
</table>

\textsuperscript{23} IRC § 45(d)(7).
\textsuperscript{24} IRC § 45(c)(6).
\textsuperscript{25} 42 U.S.C. 2011 et seq.