

Request for Comments on Certain Energy Generation Incentives

Notice 2022-49

SECTION 1. PURPOSE

The Department of the Treasury (Treasury Department) and the Internal Revenue Service (IRS) plan to issue guidance regarding the provisions of §§ 45, 45U, 45Y, 48, and 48E of the Internal Revenue Code (Code), as amended or added by §§ 13101, 13105, 13701, 13102, and 13702, respectively, of Public Law 117-169, 136 Stat. 1818 (August 16, 2022), commonly known as the Inflation Reduction Act of 2022 (IRA). This notice requests general as well as specific comments on issues arising under §§ 45, 45U, 45Y, 48, and 48E. Comments received in response to this notice will help to inform development of guidance implementing §§ 45, 45U, 45Y, 48, and 48E.

SECTION 2. BACKGROUND

.01 Renewable Electricity Production Credit (§ 45).

For purposes of computing the general business credit under § 38 of the Code, § 45(a) allows a credit for any taxable year for electricity produced by the taxpayer from qualified energy resources at a qualified facility and sold to an unrelated person during the taxable year. The § 45 credit has been amended many times since its enactment on October 24, 1992. Most recently, §§ 13101(a) to (c), (e)(1) and (2)(A), (f) through (j), 13102(f)(4), and 13204(b)(1) of the IRA made amendments to § 45. These

amendments include, but are not limited to: changing the credit rate (and associated rounding convention) for electricity produced by certain facilities; extending the beginning of construction and placed in service deadlines for certain facilities; adding a special rule for electricity used at a clean hydrogen facility; amending the definition of marine and hydrokinetic renewable energy; and providing the Secretary of the Treasury or her delegate (Secretary) with the authority to issue regulations or other guidance as necessary to carry out the purposes of § 45(b), including regulations or other guidance which provides requirements for recordkeeping or information reporting for purposes of administering the requirements of § 45(b).¹

.02 Energy Investment Credit (§ 48).

For purposes of the investment credit under § 46, § 48(a)(1) provides, in part, that the energy credit for any taxable year is the energy percentage of the basis of each energy property placed in service during such taxable year. Congress has repeatedly amended § 48, including repealing and suspending the credit, changing the amount of the credit and rules for eligibility.

Most recently, §§ 13101(d), (e)(2)(B) and (3), 13102(a) through (f)(3), (g), (h), (j) through (m), (o), (p), 13103(a), and 13204(c)(1) and (2) of the IRA made amendments to § 48. These amendments include, but are not limited to: changing the energy percentage used to calculate the credit; amending the definitions of certain types of

¹ Other amendments made by the IRA to § 45 increase the credit amount if certain prevailing wage, apprenticeship, domestic content, and energy communities requirements are satisfied. The IRA also provides an election for a taxpayer to receive a direct payment or to transfer the credit. Another amendment made by the IRA addresses the credit phaseout for a taxpayer that makes an election for direct payment. Similar provisions were added by the IRA to several other provisions of the Code discussed in this notice. See Notice 2022-51 requesting comments on prevailing wage, energy communities, and apprenticeship requirements related to several Code sections and Notice 2022-50 requesting comments on direct payment and transferability issues related to several Code sections.

energy property; extending the beginning of construction and placed in service deadlines for certain types of energy property; adding a new rule for interconnection property; adding an election to treat clean hydrogen production facilities as energy property; expanding the definition of “energy property” to include certain electrochromic glass, energy storage technology, qualified biogas property, and microgrid controllers; modifying eligibility dates regarding the election to treat as energy property certain types of qualified facilities referred to as a “qualified investment credit facility”; establishing a special program to encourage the placement of certain facilities in connection with low-income communities (discussed in section 2.06 of this notice); and providing the Secretary with the authority to issue regulations or other guidance as necessary to carry out the purposes of § 48, including regulations or other guidance providing for recapture of the credit in certain situations and the recordkeeping or information reporting for purposes of administering the requirements of § 48(a).

.03 Zero-Emission Nuclear Power Production Credit (§ 45U).

Section 13105 of the IRA added new § 45U, the zero-emission nuclear power production credit, to provide an income tax credit for electricity produced at a qualified nuclear power facility and sold by the taxpayer to an unrelated person in taxable years beginning after December 31, 2023, and before January 1, 2033. A qualified nuclear power facility is a facility owned by the taxpayer that was placed in service before the enactment of § 45U and uses nuclear energy to produce electricity. A facility that is an advanced nuclear power facility as defined in § 45J(d)(1) is not a qualified nuclear power facility under § 45U.

The credit under § 45U(a) is calculated by multiplying the kilowatt hours of

electricity produced and sold during the taxable year by 0.3 cents (adjusted for inflation), and then subtracting the “reduction amount” for such taxable year. Section 45U(b)(2)(A) defines the term “reduction amount” as the lesser of (1) the credit amount determined before application of the reduction amount or (2) the amount equal to 16 percent of the excess of (a) the gross receipts from any electricity produced by the facility and sold to an unrelated person during the taxable year, over (b) the amount equal to the product of 2.5 cents (adjusted for inflation) multiplied by the kilowatt hours of electricity produced by the facility and sold to an unrelated person during the taxable year. Section 45U(b)(2)(B) provides rules regarding the treatment of gross receipts. The credit amount determined under § 45U(a) is multiplied by 5 if certain prevailing wage requirements are met. Section 45U(d)(3) grants the Secretary authority to issue regulations or other guidance to administer the wage requirements of § 45U.

.04 Clean Electricity Production Credit (§ 45Y).

Section 13701 of the IRA added new § 45Y, the clean electricity production credit, to provide a tax credit for electricity produced by the taxpayer at a qualified facility and either (1) sold by the taxpayer to an unrelated person during the taxable year, or (2) in the case of a qualified facility which is equipped with a metering device which is owned and operated by an unrelated person, sold, consumed, or stored by the taxpayer during the taxable year. Section 45Y(b)(1)(A) defines a “qualified facility” as a facility owned by the taxpayer that is used for the production of electricity, placed in service after 2024, and has a greenhouse gas emissions rate of not greater than zero. A facility will be considered a qualified facility for a period of ten years beginning on the date it is placed in service. A facility placed in service before January 1, 2025, also can

be considered a qualified facility to the extent of the increased amount of electricity produced at the facility by reason of a new unit placed in service after December 31, 2024, or additions of capacity placed in service after December 31, 2024.

Section 45Y(a)(1) provides that the amount of the credit is equal to the product of (A) the kilowatt hours of electricity produced and sold to an unrelated person (or sold, consumed, or stored if the facility is equipped with a metering device) by the taxpayer during the taxable year, multiplied by (B) the applicable amount with respect to such qualified facility. Section 45Y(a)(2) provides that the applicable amount is generally 0.3 cents (adjusted for inflation), which can be increased to 1.5 cents (adjusted for inflation) if requirements for prevailing wage and apprenticeship are met.

Section 45Y(b)(2) provides that the greenhouse gas emissions rate is the amount of greenhouse gases emitted into the atmosphere by a facility that produces electricity, expressed as grams of CO₂e per kWh. The emissions rate for different types or categories of facilities will be published annually by the Secretary, and to the extent not established by the Secretary, a taxpayer that owns the facility may file a petition for determination of the rate. Section 45Y(b)(2) also provides special greenhouse gas accounting rules allowing calculation of a net greenhouse gas emissions rate for facilities producing electricity through combustion or gasification.

Section 45Y(d) provides a credit phase-out for projects the construction of which begins during the first, second, or third calendar year following the “applicable year,” which is the later of (i) the calendar year in which the Secretary determines that the annual greenhouse gas emissions from the production of electricity in the United States are equal to or less than 25 percent of such emissions for calendar year 2022, or (ii)

2032.

Section 45Y(f) directs the Secretary to issue guidance regarding implementation of § 45Y not later than January 1, 2025, including calculation of greenhouse gas emission rates for qualified facilities and determination of clean electricity production credits under § 45Y.

.05 Clean Electricity Investment Credit (§ 48E).

Section 13702 of the IRA added § 48E, the clean electricity investment credit, to provide an investment tax credit for qualified property. The credit amount for any taxable year is equal to the applicable percentage of the qualified investment for such taxable year with respect to any qualified facility and any energy storage technology. The applicable percentage for both qualified facilities and energy storage technology is generally 6 percent. The applicable percentage can be increased to 30 percent if prevailing wage and apprenticeship requirements are met.

A qualified facility is a facility used for the generation of electricity and placed in service after December 31, 2024, for which the anticipated greenhouse gas emissions rate is not greater than zero. Section 48E(b)(3) incorporates the special greenhouse gas accounting rules provided in § 45Y(b)(2) that allow the calculation of a net greenhouse gas emissions rate for facilities producing electricity through combustion or gasification and for facilities that include carbon capture and sequestration equipment.

A taxpayer's qualified investment with respect to any qualified facility for any taxable year is the sum of: the basis of any qualified property placed in service by the taxpayer during a taxable year that is part of a qualified facility plus, for qualified facilities with a maximum net output of not greater than 5 megawatts, certain

expenditures paid or incurred by the taxpayer for qualified interconnection property. A taxpayer's qualified investment with respect to energy storage technology for any taxable year is the basis of the energy storage technology placed in service by the taxpayer during such taxable year.

Section 48E(h) provides a special program for certain facilities placed in service in connection with low-income communities. These rules are discussed in section 2.06 of this notice with the discussion of § 48(e). Section 48E(i) directs the Secretary to issue guidance regarding the implementation of § 48E not later than January 1, 2025.

.06 Special programs for certain facilities placed in service in connection with low-income communities (§§ 48(e) and 48E(h)).

Section 13103 of the IRA amended § 48 to add new § 48(e), which establishes a special program for certain solar and wind facilities placed in service in connection with low-income communities, effective January 1, 2023. Section 13702(a) of the IRA also enacted § 48E(h), which provides a similar special program for certain facilities placed in service in connection with low-income communities in calendar years after 2024. These provisions increase the amount of the § 48 credit and § 48E credit for facilities with a maximum net output of less than 5 megawatts (as measured in alternating current) by providing a 10 percent increase in the energy percentage (in the case of § 48(e)) or the applicable percentage (in the case of § 48E(h)), used to calculate the credit amount, for certain facilities located in low-income communities (as defined in § 45D(e) of the Code) or on Indian land (as defined in § 2601(2) of the Energy Policy Act of 1992 (25 U.S.C. 3501(2))), or a 20 percent increase in the energy percentage or applicable percentage for certain facilities that are part of certain low-income residential building projects or low-income economic benefit projects. These increased credit

amounts are limited by the facility's environmental justice solar and wind capacity limitation allocation (§ 48(e)) or its environmental justice capacity limitation allocation (§ 48E(h)).

Section 48(e)(4) directs the Secretary to establish a program to allocate amounts of environmental justice solar and wind capacity limitation to qualified solar and wind facilities within 180 days of enactment of the IRA. The total amount of environmental justice solar and wind capacity allocation available during any calendar year is limited to 1.8 gigawatts of direct current capacity for each of the years 2023 and 2024. If the 1.8-gigawatt capacity limitation for any calendar year exceeds the aggregate amount allocated for such year, the excess is carried forward to the next year, but not beyond a calendar year after 2024. After that, the excess from 2024 may be carried forward and applied to the capacity limitation for 2025 under § 48E(h).

Section 48E(h)(4)(A) directs the Secretary to establish a program to allocate amounts of environmental justice capacity limitation to applicable facilities not later than January 1, 2025. The total amount of environmental justice capacity limitation available during any calendar year is limited to 1.8 gigawatts of direct current capacity for each calendar year during the period beginning on January 1, 2025, and ending on December 31 of the Applicable Year (as defined in § 45Y(d)(3)), and zero thereafter. If the 1.8-gigawatt capacity limitation for any calendar year exceeds the aggregate amount allocated for such year, the excess increases the limitation for the next year. However, no amount may be carried forward to any calendar year after the third calendar year following the Applicable Year. To be eligible for the credit increase, the facility must be placed in service within 4 years after the date of the allocation of

environmental justice capacity limitation to the facility.

SECTION 3. REQUEST FOR COMMENTS

The Treasury Department and the IRS request comments on any questions arising from the IRA amendments to §§ 45 and 48 and the IRA's enactment of §§ 45U, 45Y, and 48E. Commenters are encouraged to specify the issues on which guidance is needed most quickly as well as the most important issues on which guidance is needed. In addition to general comments, the Treasury Department and the IRS request comments that address the following specific issues:

.01 IRA Changes to the Renewable Electricity Production Credit (§ 45)

(1) Section 45(e)(13) provides that electricity produced by a taxpayer will be treated as sold by such taxpayer to an unrelated person during the taxable year if

(A) such electricity is used during such taxable year by the taxpayer or a person related to the taxpayer at a qualified clean hydrogen production facility (as defined in § 45V(c)(3)) to produce qualified clean hydrogen (as defined in § 45V(c)(2)), and

(B) such use and production is verified (in such form or manner as the Secretary may prescribe) by an unrelated third party.

(a) What existing industry standards, if any, should the Treasury Department and the IRS consider in establishing guidelines for how an unrelated third party will verify that electricity produced by a facility for which the taxpayer is claiming the § 45 credit has been used to produce qualified clean hydrogen?

(b) The term "unrelated person" is used in section 45 (as well as other provisions discussed in this notice that were added or amended by the IRA). Is guidance needed to clarify the meaning of the term "unrelated person"? If so, how should that term be

clarified?

(2) Sections 45(b)(3), 48(a)(4), 45Y(g)(8), 48E(d)(2) and several other sections in the IRA include a reduction in the respective credit for tax-exempt bond financing. The reduction is calculated in accordance with § 45(b)(3) (or rules similar to the rule under § 45(b)(3)). What additional guidance would be helpful in determining how to calculate the reduction?

(3) Section 45(c)(10)(A)(v), as amended by the IRA, provides a modified definition of marine and hydrokinetic energy by adding pressurized water used in a pipeline (or similar man-made conveyance) that is operated for the distribution of water for agricultural, municipal, or industrial consumption and not primarily for the generation of electricity. Is guidance needed to define these qualified facilities? If so, how should these qualified facilities be defined?

(4) Please provide comments on any other topics relating to the § 45 credit that may require guidance.

.02 The Energy Investment Credit (§ 48)

(1) IRA Changes to the Energy Investment Credit (§ 48)

(a) The IRA expanded the definition of energy property to include electrochromic glass, energy storage technology, qualified biogas property, and microgrid controllers.

(i) What should the Treasury Department and the IRS consider in determining what types of technologies are included in the definitions of these new types of energy property?

(ii) What should the Treasury Department and the IRS consider in determining what components of those technologies are included in energy property?

(b) Section 48(a)(8) provides that for certain energy property amounts paid or incurred for qualified interconnection property may be included in basis.

(i) For interconnection property, what types of additions, modifications, or upgrades to the transmission or distribution system are required for the purpose of accommodating interconnection?

(ii) For interconnection property, what type of documentation, in addition to interconnection agreements and cost certification reports, is readily available for a taxpayer to demonstrate that they have paid or incurred interconnection costs?

(iii) For interconnection property, is guidance needed to define energy property that has a maximum net output of not greater than 5 megawatts (as measured in alternating current)?

(c) Please provide comments on any other topics relating to the § 48 credit that may require guidance.

(2) Additional Issues Regarding the Energy Investment Credit (§ 48)

(a) Is guidance needed to determine whether an investment credit facility that elects to claim the § 48 investment tax credit in lieu of the § 45 production tax credit is subject to all of the requirements of § 45, including the requirement that electricity generated by the investment credit facility be sold to an unrelated person? If so, what factors should the Treasury Department and the IRS consider regarding such guidance?

(b) Is clarification needed on the applicability of the 80/20 rule used to determine whether retrofitted or repowered projects may qualify as new energy property? If so, how should this be clarified?

(c) Section 48(a)(3)(A)(i) provides that energy property includes “equipment which uses solar energy to generate electricity, to heat or cool (or provide hot water for use in) a structure.” Is guidance needed to clarify the meaning of the term “structure”? If so, how should this term be clarified?

(d) Please provide comments on any other topics relating to the § 48 credit that may require guidance.

.03 IRA Addition of the Zero-Emission Nuclear Power Production Credit (§ 45U)

(1) Section 45U(a)(2) reduces the amount of the § 45U credit by a “reduction amount” that is calculated, in part, based on the gross receipts from any electricity produced by the facility. Section 45U(b)(2)(B) provides that gross receipts generally include any amount received by a qualified facility that are from a zero-emission credit program, unless an exclusion applies. Is guidance needed to clarify the meaning of the term “gross receipts,” especially as it applies to taxpayers receiving revenue through cost-of-service regulation or regulated contracts and who do not sell electricity in a manner attributable to individual nuclear reactors such as through sales into organized electricity markets or via power purchase agreements to third parties? If so, how should “gross receipts” be clarified? Should it be defined by cross reference to § 448(c) of the Code?

(2) Section 45U(b)(2)(B)(ii) defines the term “zero-emission credit program.” What should the Treasury Department and the IRS consider in determining whether a payment is as a result of a government program for the zero-emission, zero-carbon, or air quality attributes of any portion of the electricity produced by the facility?

(3) Section 45U(b)(2)(B)(iii) excludes from gross receipts, for purposes of the

reduction amount calculation, any amount received by the taxpayer from a zero-emission credit program if the full amount of the § 45U credit (determined without regard to § 45U(b)(2)(B)) is used to reduce payments from such zero-emission credit program. What should the Treasury Department and the IRS consider when determining whether the full amount of the § 45U credit (calculated pursuant to § 45U(a)) is used to reduce payments from a zero-emission credit program?

(4) Please provide comments on any other topics relating to the § 45U credit that may require guidance.

.04 IRA Addition of the Clean Electricity Production Credit (§ 45Y)

(1) What existing industry standards, if any, should the Treasury Department and the IRS consider in determining a taxpayer's eligibility for the § 45Y credit?

(2) Section 45Y(b)(2)(C)(i) requires the Secretary to annually publish a table that sets forth the greenhouse gas emissions rates for types or categories of facilities. What should the Treasury Department and IRS consider in publishing this table, including considerations around scope and the factors?

(3) Section 45Y(a)(1) generally provides a credit for electricity produced by the taxpayer at a qualified facility and either (1) sold by the taxpayer to an unrelated person during the taxable year, or (2) in the case of a qualified facility which is "equipped with a metering device which is owned and operated by an unrelated person, sold, consumed, or stored by the taxpayer during the taxable year." Is guidance needed to clarify when a facility is "equipped with a metering device which is owned and operated by an unrelated person" or when electricity produced at such a facility is "sold, consumed, or stored by the taxpayer during the taxable year"?

(4) Section 45Y(b)(2)(C)(ii) provides that, in the case of any facility for which an emissions rate has not been established by the Secretary, a taxpayer that owns such facility may file a petition with the Secretary for a determination of the emissions rate with respect to such facility. What procedures should be provided by the Treasury Department and the IRS for taxpayers to file such a petition? What should the Secretary consider when making such determinations?

(5) Please provide comments on any other topics relating to the § 45Y credit that may require guidance.

.05 IRA Addition of the Clean Electricity Investment Credit (§ 48E)

(1) What industry mechanisms currently exist for a taxpayer to demonstrate eligibility for the credit?

(2) Please provide comments on any other topics relating to the § 45E credit that may require guidance.

.06 IRA Addition of Special Programs for Certain Facilities Placed in Service in Connection with Low-income Communities (§§ 48(e) and 48E(h))

(1) Sections 48(e)(4)(A) and 48E(h)(4)(A) require the Secretary to establish a program to allocate amounts of environmental justice capacity limitation to applicable facilities. In establishing such program, the Secretary must provide procedures to allow for an efficient allocation process.

(a) What should the Treasury Department and the IRS consider in providing guidance regarding the application process for taxpayers seeking an allocation of the environmental justice capacity limitation?

(b) How can the application procedures and application process be made accessible to taxpayers?

(c) How can the process incorporate community input, engagement, and benefit for projects seeking an allocation of the environmental justice capacity limitation?

(2) What stage of completion, if any, should be required of the taxpayer at the time of application for or allocation of amounts of environmental justice capacity limitation (since the taxpayer will have four years to place the facility in service)?

(3) What methods currently exist or need to be designed for a taxpayer to certify that a project is being built in a low-income community, on Indian land, or as part of a low-income residential building project or a qualified low-income economic benefit project?

(4) What mechanisms exist for a taxpayer to demonstrate that the financial benefits of the electricity produced by an applicable facility are allocated equitably among the occupants of a low-income residential building project and do not impact the occupants' eligibility for their housing? Similarly, what mechanisms exist for a taxpayer to demonstrate that at least 50 percent of the financial benefits of electricity produced by an applicable facility which is part of a low-income economic benefit project are provided to households within certain income thresholds?

(5) Is guidance needed to clarify the meaning of the term "financial benefit"?

(6) What is a financial benefit of the electricity produced by an applicable facility other than electricity acquired at a below-market rate for occupants of low-income residential building projects and low-income economic benefit projects?

(7) What should the Treasury Department and the IRS consider in providing guidance regarding the recapture of the benefits of the credit increase allowed under §§ 48(e) and 48E(h) when property ceases to be property eligible for such credit

increase? How should the one-time restoration of eligibility be documented before recapture?

(8) Please provide comments on any other topics relating to the environmental justice capacity limitation under §§ 48(e) and 48E(h) that may require guidance.

SECTION 4: SUBMISSION OF COMMENTS

.01 Written comments should be submitted by Friday, November 4, 2022.

Consideration will be given, however, to any written comment submitted after Friday, November 4, 2022, if such consideration will not delay the issuance of guidance. The subject line for the comments should include a reference to Notice 2022-49. Comments may be submitted in one of two ways:

(1) Electronically via the Federal eRulemaking Portal at www.regulations.gov (type IRS-2022-0049 in the search field on the regulations.gov homepage to find this notice and submit comments).

(2) Alternatively, by mail to: Internal Revenue Service, CC:PA:LPD:PR (Notice 2022-49), Room 5203, P.O. Box 7604, Ben Franklin Station, Washington, DC 20044.

.02 All commenters are strongly encouraged to submit comments electronically. The Treasury Department and the IRS will publish for public availability any comment submitted electronically, or on paper, to its public docket on www.regulations.gov.

SECTION 5. 60-DAY RULE NOT EFFECTUATED FOR THE PREVAILING WAGE AND APPRENTICESHIP REQUIREMENT

For purposes of §§ 30C, 45, 45L, 45Q, 45U, 45V, 45Y, 45Z, 48, 48C, 48E, and 179D, the publication of this notice requesting comments is not the publication of guidance with respect to the prevailing wage and apprenticeship requirements, and it is not relevant in determining whether the prevailing wage and apprenticeship

requirements are satisfied under such sections. The Treasury Department and the IRS will explicitly identify when they have published guidance with respect to the prevailing wage and apprenticeship requirements that is relevant for determining whether such requirements have been satisfied for purposes of §§ 30C, 45, 45L, 45Q, 45U, 45V, 45Y, 45Z, 48, 48C, 48E, and 179D.

SECTION 6. DRAFTING INFORMATION

The principal author of this notice is the Office of Associate Chief Counsel (Passthroughs & Special Industries). However, other personnel from the Treasury Department and the IRS participated in its development. For further information regarding this notice, call the energy security guidance contact number at (202) 317-5254 (not a toll-free call).