DEPARTMENT OF THE TREASURY

Internal Revenue Service

26 CFR Part 1

[REG–132569–17]

RIN 1545–BO40

Definition of Energy Property and Rules Applicable to the Energy Credit

AGENCY: Internal Revenue Service (IRS), Treasury.

ACTION: Notice of proposed rulemaking, public hearing, and partial withdrawal of notice of proposed rulemaking.

SUMMARY: This document contains proposed regulations that would amend the regulations relating to the energy credit for the taxable year in which eligible energy property is placed in service. This document also withdraws and reproposes, for additional clarity, portions of previously proposed regulations regarding the increased energy credit amount available if prevailing wage and registered apprenticeship requirements are met. In connection with the Inflation Reduction Act of 2022, the proposed regulations would: update the types of energy property eligible for the energy credit, including additional types of energy property added by that law; clarify the application of new credit transfer rules to the energy credit recapture rules applicable to failures to satisfy the prevailing wage requirements, including notification requirements for eligible taxpayers; and include qualified interconnection costs in the basis of some lower-output energy properties. The proposed regulations would also provide additional requirements and rules generally applicable to energy property, such as rules regarding: functionally interdependent components; property that is an integral part of an energy property; application of an ''80/20 Rule'' to retrofitted energy property; dual use property; separate ownership of components of an energy property; property that could be eligible for multiple Federal income tax credits; and the election to treat qualified facilities eligible for the renewable electricity production credit instead as property eligible for the energy credit. The proposed regulations would impact taxpayers who invest in energy property eligible for the energy credit.

DATES: Written or electronic comments must be received by January 22, 2024. A public hearing on these proposed regulations is scheduled to be held on February 20, 2024, at 10 a.m. ET. Requests to speak and outlines of topics to be discussed at the public hearing must be received by January 22, 2024. If no outlines are received by January 22, 2024, the public hearing will be cancelled. Requests to attend the public hearing must be received by 5 p.m. on February 15, 2024. The public hearing will be made accessible to people with disabilities. Requests for special assistance during the hearing must be received by 5 p.m. on February 14, 2024.

ADDRESSES: Commenters are strongly encouraged to submit public comments electronically. Submit electronic submissions via the Federal eRulemaking Portal at *www.regulations.gov* (indicate IRS and REG–132569–17) by following the online instructions for submitting comments. Once submitted to the Federal eRulemaking Portal, comments cannot be edited or withdrawn. The Department of Treasury (Treasury Department) and the IRS will publish for public availability any comments submitted, whether electronically or on paper, to the IRS's public docket.

Send paper submissions to: CC:PA:LPD:PR (REG–132569–17), Room 5203, Internal Revenue Service, P.O. Box 7604, Ben Franklin Station, Washington, DC 20044.

FOR FURTHER INFORMATION CONTACT: Concerning the proposed regulations, Office of Associate Chief Counsel (Passthroughs & Special Industries) at (202) 317–6853 (not a toll-free number); concerning submissions of comments or the public hearing, Vivian Hayes, (202) 317–6901 (not toll-free number) or by email to *publichearings@irs.gov* (preferred).

SUPPLEMENTARY INFORMATION:

Background

This notice of proposed rulemaking consists of several proposed amendments to the existing Income Tax Regulations (26 CFR part 1) under section 48 of the Internal Revenue Code (Code) addressing the energy credit determined under section 48 (section 48 credit) for purposes of sections 38 and 46 of the Code (proposed regulations). This notice of proposed rulemaking also withdraws and reproposes portions of another notice of proposed rulemaking (REG–100908–23) proposing regulations under section 48 that were published in the **Federal Register** (88 FR 60018) on August 30, 2023. This notice of proposed rulemaking would also propose additional regulations under section 6418 of the Code to supplement a notice of proposed rulemaking (REG–101610–23) published in the **Federal Register** (88 FR 40496) on June 21, 2023.

Section 38 allows certain business credits against the Federal income tax imposed by chapter 1 of the Code (chapter 1). Among the credits allowed by section 38 are the investment credit determined under section 46, which includes the energy credit determined under section 48. See sections 38(b)(1) and 46(2). Section 48(a)(1) generally provides 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. For most types of energy property, eligibility for the section 48 credit and, in some cases, the amount of the section 48 credit for which energy property is eligible, are dependent upon meeting certain deadlines for beginning construction of the energy property and for placing the energy property in service.

Section 48 was originally enacted by section 2 of the Revenue Act of 1962, Public Law 87–834, (76 Stat. 960, 963) to spur economic growth by encouraging investments in various capital projects across many industries including energy, transportation, and communications. Section 48 has been amended many times since its enactment, most recently by section 13102 of Public Law 117–169, 136 Stat. 1818 (August 16, 2022), commonly known as the Inflation Reduction Act of 2022 (IRA). The IRA amended section 48 in several ways, including by making additional types of energy property eligible for the section 48 credit, providing a special rule to allow certain lower-output energy properties to include qualified interconnection costs in the basis of associated energy property, and providing an increased credit amount for energy projects that satisfy prevailing wage and apprenticeship requirements, a domestic content bonus credit amount, and an increase in credit rate for energy communities.

The current Income Tax Regulations at § 1.48–9, which provide definitions and eligibility rules for determining whether property is energy property eligible for the section 48 credit, were published on January 23, 1981 (T.D. 7765, 46 FR 7287). Those regulations were amended on July 21, 1987 (T.D. 8147, 52 FR 27336), to provide rules for dual use property, but have not been updated since 1987, before many of the current types of energy property became eligible for the section 48 credit.

Prior to proposing amendments to the existing regulations under section 48, the Treasury Department and the IRS have twice requested comments on issues to be addressed. On October 26, 2015, the Treasury Department and the

IRS published Notice 2015–70, 2015–43 I.R.B. 604, to request comments regarding statutory updates to section 48 preceding those made by the IRA. On October 24, 2022, in response to the passage of the IRA, the Treasury Department and the IRS published Notice 2022–49, 2022–43 I.R.B. 321, to request general as well as specific comments on issues arising under section 48, among other sections, that were amended or added by the IRA. After consideration of comments submitted in response to Notice 2015–70 and Notice 2022–49, and after consultation with the Department of Energy, the Treasury Department and the IRS propose the revisions to the existing regulations under section 48 contained in this notice of proposed rulemaking.

On August 30, 2023, the Treasury Department and the IRS published in the **Federal Register** (88 FR 60018) a notice of proposed rulemaking (REG–100908–23) proposing rules regarding the increased credit amount available for taxpayers satisfying prevailing wage and registered apprenticeship requirements established by the IRA (August Proposed Regulations). The August Proposed Regulations provided rules addressing the recapture under section 48(a)(10)(C) of increased credit amounts from only initially satisfying the prevailing wage requirements under section 48(a)(10)(A) and (B). Comments were requested and a public hearing has been scheduled for November 21, 2023. This notice of proposed rulemaking withdraws certain portions of the August Proposed Regulations and reproposes regulations that would provide additional guidance on the prevailing wage and apprenticeship requirements under section 48, including the statutory exception for energy projects with a maximum output of less than one megawatt (MW) and the recapture rules under section 48(a)(10)(C) related to the prevailing wage requirements.

Although this notice of proposed rulemaking withdraws certain portions of the August Proposed Regulations, the Explanation of Provisions section in the preamble to the August Proposed Regulations generally remains relevant. Therefore, to the extent not inconsistent with the Summary of Comments and Explanation of Provisions section of this preamble, the Explanation of Provisions section of the August Proposed Regulations is incorporated by reference in this notice of proposed rulemaking. This notice of proposed rulemaking does not address written comments that were submitted in response to the regulations proposed in the August Proposed Regulations. Any comments received in response to this notice of proposed rulemaking, including comments on the reproposed regulations, will be addressed in the Treasury Decision adopting these regulations as final regulations. This notice of proposed rulemaking does not extend the comment period or affect the scheduled hearing for the August Proposed Regulations.

On June 21, 2023, the Treasury Department and the IRS published in the **Federal Register** (88 FR 40496) a notice of proposed rulemaking (REG–101610–23) proposing rules concerning the election under section 6418 of the Code established by the IRA to transfer certain Federal income tax credits, including the section 48 credit (June Proposed Regulations). The June Proposed Regulations provided proposed rules addressing notification requirements and the impact of credit recapture rules under sections 50(a), 49(b), and 45Q(f)(4) of the Code in proposed § 1.6418–5. Comments were requested and a public hearing on the June Proposed Regulations was held on August 23, 2023. This document amends those June Proposed Regulations to add guidance to proposed § 1.6418–5 that describes the recapture rules relating to failing to satisfy the prevailing wage and apprenticeship requirements under section 48(a)(10) and (11), including the statutory exception for energy projects with a maximum output of less than 1 MW in section 48(a)(9)(B)(i), and the recapture rules under section 48(a)(10)(C) related to the prevailing wage requirements. This notice of proposed rulemaking does not address written comments that were submitted in response to the regulations proposed in the June Proposed Regulations. Any comments received in response to this notice of proposed rulemaking, including the amendments to the June Proposed Regulations, will be addressed in the Treasury Decision adopting these regulations as final regulations. This notice of proposed rulemaking does not otherwise extend the comment period for the June Proposed Regulations.

Summary of Comments and Explanation of Provisions

I. Requirements for Energy Property

For purposes of the section 48 credit, energy property consists of all the components of property that meet the statutory requirements for an energy property as defined by section 48. Components of an energy property are those that would be included in a unit of energy property because they are functionally interdependent (as described in proposed § 1.48–9(f)(2)(ii)) as well as property owned by the same taxpayer that is an integral part of such energy property (as described in proposed § 1.48–9(f)(3)). Additionally, components of property must not be a type of property specifically excluded from energy property (as described in proposed § 1.48–9(d)).

Section 48(a)(3)(B)–(D) provides general requirements for all types of energy property. Section 48(a)(3)(B)(i) defines energy property as property that is constructed, reconstructed, or erected by the taxpayer. Alternatively, section 48(a)(3)(B)(ii) provides that energy property can also include property which the taxpayer acquires if the original use of such property commences with the taxpayer. Section 48(a)(3)(C) provides that to be eligible as energy property, depreciation (or amortization in lieu of depreciation) must be allowable for the property. Section 48(a)(3)(D) provides that to be eligible as energy property, the property must also meet any performance and quality standards that have been prescribed by the Secretary of the Treasury or her delegate (Secretary), after consultation with the Secretary of Energy, and are in effect at the time of the taxpayer's acquisition of the property. Under section 48(a)(3), energy property does not include property that is part of a qualified facility the production from which is allowed a renewable electricity production credit determined under section 45 (section 45 credit) for the taxable year or any prior taxable year. Lastly, where section 48 provides dates by which construction of energy property must begin or when energy property must be placed in service, such energy property must meet those deadlines to be eligible for the section 48 credit at specified energy percentages. Proposed § 1.48–9(a) would provide this general overview of the definition of energy property.

A. Definitions Related to Requirements for Energy Property

Before 1990, section 48 defined the term ''section 38 property'' to include, among other types of property, energy property eligible for the section 48 credit. The Revenue Reconciliation Act of 1990, Public Law 101–508, 104 Stat. 1388 (November 5, 1990) removed the term ''section 38 property'' in amending section 48. However, section 48 is one of the credits that comprise the investment credit for any taxable year determined under section 46, which is included in section 38(b)(1) and remains subject to the general business credit rules under section 38. As a result, rules

related to ''section 38 property'' remain generally applicable to the section 48 credit. The Treasury Department and the IRS published regulations under §§ 1.48–1 and 1.48–2 to provide guidance with respect to section 38 property. Section 1.48–1 was last substantially revised on October 11, 1988 (T.D. 8233, 53 FR 39592) and § 1.48–2 was last revised on June 28, 1985 (T.D. 8031, 50 FR 26698). Although subsequent amendments to section 48 have made some of the rules provided by these regulations inapplicable, those rules continue to provide useful definitions, some of which § 1.48–9 of these proposed regulations (proposed § 1.48–9) would adopt.

1. Construction, Reconstruction, or Erection of Energy Property

Section 48(a)(3)(B)(i) defines energy property as property that is constructed, reconstructed, or erected by the taxpayer. Existing § 1.48–2(b)(1) provides that property is considered as constructed, reconstructed, or erected by the taxpayer if the work is performed for the taxpayer in accordance with the taxpayer's specifications. Proposed § 1.48–9(b)(1) would largely adopt the definition of the term ''constructed, reconstructed, or erected'' from existing § 1.48–2(b)(1) while modifying it to address energy property.

2. Acquisition and Original Use of Energy Property

Section 48(a)(3)(B)(ii) provides that energy property includes property that is acquired by the taxpayer if the original use of such property commences with the taxpayer. Existing § 1.48–2(b)(6) provides that property is deemed to be acquired when reduced to physical possession or control by the taxpayer. Proposed § 1.48–9(b)(2) would adopt the concepts from existing § 1.48–2(b)(6), and provide additional clarification that the term ''acquisition of energy property'' means a transaction by which a taxpayer obtains rights and obligations with respect to energy property, including title to the energy property under the law of the jurisdiction in which the energy property is placed in service, unless the property is possessed or controlled by the taxpayer as a lessee, and physical possession or control of the energy property. In addition, existing § 1.48–2(b)(7) defines the term ''original use'' as the first use to which the property is put, whether or not such use corresponds to the use of such property by the taxpayer. Proposed § 1.48–9(b)(3) largely would adopt the § 1.48–2(b)(7) definition of original use while modifying it to address energy property.

3. Depreciation Allowable

Section 48(a)(3)(C) requires that energy property be property with respect to which depreciation (or amortization in lieu of depreciation) is allowable, and existing § 1.48–1(b) explains when depreciation is allowable with respect to section 38 property. Specifically, § 1.48–1(b) provides that a deduction for depreciation is allowable if the property is of a character subject to the allowance for depreciation under section 167 of the Code and the basis (or cost) of the property is recovered through a method of depreciation, including, for example, the unit of production method and the retirement method as well as methods of depreciation that measure the life of the property in terms of years. Proposed § 1.48–9(b)(4)(i) generally would adopt the § 1.48–1(b) rule for determining whether depreciation is ''allowable'' under section 48, with certain modifications to update the described methods of depreciation and to make the definition specific to energy property as defined in section 48. Proposed § 1.48–9(b)(4)(i) would also clarify that the 100-percent additional first year depreciation provided by section 168(k) of the Code is considered a method of depreciation.

In addition, existing § 1.48–1(b)(3) provides language describing when depreciation is not allowable to the taxpayer for purposes of defining section 38 property. Section 1.48–1(b)(3) provides that if the cost of property is not recovered through a method of depreciation but through a deduction of the full cost in one taxable year, for purposes of § 1.48–1(b)(1) a deduction for depreciation with respect to such property is not allowable to the taxpayer. However, if an adjustment with respect to the income tax return for such taxable year requires the cost of such property to be recovered through a method of depreciation, a deduction for depreciation will be considered as allowable to the taxpayer.

Proposed § 1.48–9(b)(4)(ii) generally would adopt this rule from § 1.48–1(b)(3) to determine when depreciation is not allowable, with certain modifications to update the described methods of depreciation and to make the definition specific to energy property as defined in section 48. Proposed § 1.48–9(b)(4) would provide that if the basis or cost of energy property is not recovered through a method of depreciation but through a deduction of the full cost in one taxable year, a deduction for depreciation with respect to such property is not allowable to the taxpayer.

However, proposed § 1.48–9(b)(4)(i) would provide that if an IRS adjustment with respect to an income tax return or information return for such taxable year requires the basis or cost of such property to be recovered using a method of depreciation, including any additional first year depreciation deduction provision in the Code, a deduction for depreciation will be considered as allowable to the taxpayer.

4. Performance and Quality Standards for Energy Property

Section 48(a)(3)(D) provides that energy property is property that meets the performance and quality standards (if any) that have been prescribed by the Secretary by regulations (after consultation with the Secretary of Energy), and are in effect at the time of the acquisition of the property. Existing § 1.48–9(m)(1) provides that ''energy property must meet quality and performance standards, if any, that have been prescribed by the Secretary (after consultation with the Secretary of Energy) and are in effect at the time of acquisition.'' Proposed § 1.48–9(c)(2) would adopt this rule for performance and quality standards for energy property from § 1.48–9(m)(1).

After consultation with the Department of Energy, proposed § 1.48–9(c)(2)(ii) would provide special rules for performance and quality standards with respect to both small wind and electrochromic glass property. These clarifications are needed to ensure that the intended energy production or savings occurs.

a. Performance and Quality Standards for Small Wind Energy Property

Proposed § 1.48–9(c)(2)(ii)(A) would provide that small wind energy property must meet the performance and quality standards in effect at the time of acquisition of the small wind turbine set forth in one of the following: the American Wind Energy Association Small Wind Turbine Performance and Safety Standard 9.1–2009, or subsequent revisions (AWEA); International Electrotechnical Commission 61400–1, 61400–2, 61400–11, 61400–12, or subsequent revisions (IEC); or the ANSI/ACP 101–1–2021, the Small Wind Turbine Standard, or subsequent revisions (ACP). Proposed § 1.48–9(c)(2)(ii)(A) would also provide that certification requirements applicable to such performance and quality standards for small wind energy property are provided in guidance published in the Internal Revenue Bulletin, such as Notice 2015–4, 2015–5 I.R.B. 407, and

its successor, Notice 2015–51, 2015–31 I.R.B. 133.

b. Performance and Quality Standards for Electrochromic Glass Property

As described in part I.C.2.b of this Summary of Comments and Explanation of Provisions, electrochromic glass is incorporated into either an electrochromic window or secondary glazing product. Accordingly windows, including secondary glazings, that incorporate electrochromic glass are electrochromic glass property for purposes of the section 48 credit. Proposed § 1.48–9(c)(2)(ii)(B) would also adopt the requirement that windows that incorporate electrochromic glass must be rated in accordance with the National Fenestration Rating Council (NFRC) and would provide that secondary glazing systems must be rated in accordance with the Attachments Energy Rating Council (AERC) Rating and Certification Process, or subsequent revisions.

c. Time of Acquisition

Existing § 1.48–9(m)(2) provides that the time of acquisition for purposes of applying quality and performance standards for energy property is either (i) the date the taxpayer enters into a binding contract to acquire the property; or (ii) for property constructed, reconstructed, or erected by the taxpayer, the earlier of the date that the taxpayer begins construction, reconstruction, or erection of the property, or the date the taxpayer and another person enter into a binding contract requiring the other person to construct, reconstruct, or erect property and place the property in service for an agreed upon use. Proposed § 1.48–9(c)(2)(iii) would adopt the rule for the ''time of acquisition'' from § 1.48–9(m)(2) only for purposes of applying the performance and quality standards for energy property.

d. Binding Contract

Section 1.168(k)–2(b)(5)(iii)(A) provides the following definition of a binding contract in the context of the acquisition of qualified property for the allowance of additional first year depreciation under section 168(k) of the Code:

> A contract is binding only if it is enforceable under State law against the taxpayer or a predecessor, and does not limit damages to a specified amount (for example, by use of a liquidated damages provision). For this purpose, a contractual provision that limits damages to an amount equal to at least five percent of the total contract price will not be treated as limiting damages to a specified amount.

Proposed § 1.48–9(c)(2)(iv) would adopt this definition of the term ''binding contract'' from § 1.168(k)–2(b)(5)(iii)(A) for purposes of applying the performance and quality standards for energy property.

5. Placed in Service

Section 48(a) provides 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. As part of the regulations under section 46 for the investment credit, § 1.46–3(d)(1) provides general rules for determining when a taxpayer has placed a property in service for the section 48 credit. Property is considered placed in service in the earlier of the taxable year in which, under the taxpayer's depreciation practice, the period for depreciation with respect to such property begins; or the taxable year in which the property is placed in a condition or state of readiness and availability for a specifically assigned function, whether in a trade or business, in the production of income, in a tax-exempt activity, or in a personal activity.

Proposed § 1.48–9(b)(5) largely would adopt the general rules from § 1.46–3(d)(1) for determining whether a taxpayer has placed an energy property in service with certain modifications. As discussed previously, to be eligible for the section 48 credit, energy property must be property with respect to which depreciation (or amortization in lieu of depreciation) is allowable. Further, one requirement for determining if depreciation is allowable with respect to energy property is that the basis or cost of such energy property is recovered using a method of depreciation. Accordingly, proposed § 1.48–9(b)(5)(i) clarifies that the taxable year in which energy property is placed in service would be the earlier of the taxable year in which the period for depreciation of such property begins, or the taxable year in which the energy property is placed in a condition or state of readiness and availability for a specifically assigned function in either a trade or business or in the production of income.

In addition, section 50(b)(3) of the Code provides that tax-exempt organizations cannot determine an investment tax credit, including the section 48 credit, unless the property is used predominantly in an unrelated trade or business, so the proposed regulations do not include a rule applicable to tax-exempt use. However, section 6417(d)(2) of the Code provides that an applicable entity (as defined in section 6417(d)(1), and including a tax-exempt organization) making an elective payment election under section 6417 can determine an applicable credit (defined in section 6417(b), and including the section 48 credit) without regard to section 50(b)(3), by treating any property with respect to which the section 48 credit is determined as used in a trade or business of the applicable entity. (See the rules of proposed § 1.6417–2(c)(2) contained in the notice of proposed rulemaking (REG–101607–23) published in the **Federal Register** (88 FR 40528) on June 21, 2023.) Thus, if the rules under section 6417(d)(2) apply, the general rule adopted in proposed § 1.48–9(b)(5)(i) would apply to determine when the energy property is placed in service by an applicable entity.

Section 1.46–3(d)(3) provides that notwithstanding the provisions of § 1.46–3(d)(1), property with respect to which an election is made under § 1.48–4 to treat the lessee as having purchased such property is considered placed in service by the lessor in the taxable year in which possession is transferred to such lessee. Proposed § 1.48–9(b)(5)(ii) would adopt the special rule from § 1.46–3(d)(3) for determining when a leased property has been placed in service.

B. Property Excluded From Energy Property

Section 48(a)(5) generally provides an election to treat certain types of qualified facilities as defined in section 45(d), referred to as a ''qualified investment credit facility,'' as energy property for purposes of section 48. However, section 48(a)(5)(B) provides that no section 45 credit is allowed for any taxable year with respect to any qualified investment credit facility. Section 48(a)(5)(C) provides, in part, that the term ''qualified investment credit facility'' means any qualified facility with respect to which no section 45 credit has been allowed for which the taxpayer makes an irrevocable election. Accordingly, proposed § 1.48–9(d) would exclude from energy property any property that is part of a qualified facility with respect to which a section 45 credit is allowed for any taxable year, including any prior taxable year.

The Treasury Department and the IRS understand that energy storage technologies eligible for the section 48 credit are often co-located with qualified facilities eligible for the section 45 credit and may share power conditioning and transfer equipment. In consideration of this practice, the proposed rules would provide that power conditioning and transfer equipment that is shared by a qualified

facility (as defined in section 45(d)) and an energy property may be treated as an integral part of the section 48 energy property. Such shared property is not considered part of a qualified facility and, therefore, the sharing of such property will not impact the ability of a taxpayer to claim the section 48 credit for the energy property or the section 45 credit for the qualified facility. The Treasury Department and the IRS request comments regarding whether additional guidance is needed on this rule.

C. Types of Energy Property

Proposed § 1.48–9(e) would expand upon the definitions of energy property provided in existing § 1.48–9 to account for new technologies that were added by amendments to section 48, including by section 13102 of the IRA. Generally, the definitions of the types of energy property provided in the proposed regulations do not provide specific beginning of construction or placed in service deadlines. Taxpayers should refer to the current statutory language of section 48 for specific requirements applicable to each type of energy property with respect to any particular taxable year. The following definitions in proposed § 1.48–9(e) for the different types of energy properties were developed by the Treasury Department and the IRS in consultation with the Department of Energy.

1. Solar Energy Property

Section 48(a)(3)(A)(i) provides that energy property includes solar energy property and defines solar energy property as any property that is equipment that uses solar energy to generate electricity, to heat or cool (or provide hot water for use in) a structure, or to provide solar process heat, excepting property used to generate energy for the purposes of heating a swimming pool.

Existing § 1.48–9(d)(1) defines solar energy property as including equipment and materials (and parts related to the functioning of such equipment) that use solar energy directly to (i) generate electricity, (ii) heat or cool a building or structure, or (iii) provide hot water for use within a building or structure. Further, existing § 1.48–9(d)(3), in part, defines solar electric generation equipment as equipment that uses solar energy to generate electricity through a process that involves the transformation of sunlight into electricity through the use of such devices as solar cells or other collectors.

In response to Notice 2015–70, commenters requested that the Treasury Department and the IRS provide guidance regarding specific components that may be considered solar energy property, including in photovoltaic (PV) systems (including concentrated PV systems), non-PV concentrated solar power systems (passive solar), solar process, and thermal systems. Several commenters requested that the regulations explicitly list certain types of technologies as solar energy property, such as integrated thermoplastic roofing and racking systems. Other commenters requested that the regulations simply define solar energy property to include common components such as controllers to manage use of solar energy, mounting structures, energy storage technology, power conditioning equipment, and step-up transformers.

Proposed § 1.48–9(e)(1)(i) would depart from the existing definition of solar energy property at § 1.48–9(d)(1) by adopting a modified version of the current statutory definition, which provides that solar energy property is equipment that uses solar energy to generate electricity, to heat or cool a structure, or to provide solar process heat, and parts related to the functioning of such equipment. Proposed § 1.48–9(e)(1)(ii) would define the term ''solar electric generation equipment'' as equipment that converts sunlight into electricity through the use of devices such as solar cells or other collectors, while adopting the current statutory exclusion for any property used to generate energy for the purposes of heating a swimming pool. The proposed regulations would eliminate the exclusion for passive solar in existing § 1.48–9(d)(2) because section 48 does not distinguish between passive and active solar energy systems. Finally, the proposed regulations would apply the functional interdependence test as described in part I.D.2 of this Summary of Comments and Explanation of Provisions to determine whether components are included as part of solar energy property.

Existing § 1.48–9(d)(7) provides that solar energy property does not include equipment that uses solar energy to generate steam at high temperatures for use in industrial or commercial processes (solar process heat). This definition conflicts with section 48(a)(3)(A)(i). Accordingly, the proposed regulations would adopt the statutory language by explicitly including solar process heat within the definition of the term ''solar energy property.'' After consultation with the Department of Energy, proposed § 1.48–9(e)(1)(iii) would define ''solar process heat equipment'' as equipment that uses solar energy to generate heat for use in industrial or commercial processes.

2. Fiber-Optic Solar Energy Property and Electrochromic Glass Property

a. Fiber-Optic Solar Energy Property

Section 48(a)(3)(A)(ii) provides that energy property includes equipment that uses solar energy to illuminate the inside of a structure using fiber-optic distributed sunlight. The Treasury Department and the IRS received no comments in response to Notice 2022–49 regarding fiber-optic solar energy property. Accordingly, proposed § 1.48–9(e)(2)(i) would adopt the statutory definition of fiber-optic solar energy property. Additionally, the proposed regulations would apply the functional interdependence test as described in part I.D.2 of this Summary of Comments and Explanation of Provisions to determine whether components are included as part of fiber-optic solar energy property.

b. Electrochromic Glass Property

Section 48(a)(3)(A)(ii) was modified by the IRA to add electrochromic glass property as a type of energy property. That provision defines electrochromic glass property as equipment that uses electricity to change its light transmittance properties in order to heat or cool a structure. The Treasury Department and IRS consulted with the Department of Energy to determine the types of property eligible as electrochromic glass property. Accordingly, § 1.48–9(e)(2)(ii) would provide that there are only two types of electrochromic glass property: (i) electrochromic glass incorporated into a full window that is installed directly into a building or (ii) electrochromic glass incorporated into a secondary window (known as secondary glazing) that is installed on top of an existing window. For each type of electrochromic glass property, there is a separate control package consisting of electronics, power supply, sensors, and software necessary to control the operations of the electrochromic glass property. Thus, electrochromic glass property is not only comprised of electrochromic glass but also the relevant window or secondary glazing property that incorporates the electrochromic glass property. Therefore, in addition to the electronic controls package that includes the power electronics, sensors, wires, and software systems, the electrochromic window or secondary glazing also includes the electrochromic glass coating and the balance of window and installation components including glass, flashing, framing, and sealants, as applicable, to the type of electrochromic glass property.

In response to Notice 2022–49, several commenters provided input on the definition of electrochromic glass property. Several commenters requested a narrow definition. Other commenters suggested adopting a broader definition of electrochromic glass property. One commenter stated that interpretations of the terms ''electrochromic glass'' or ''dynamic glass'' should be expanded to include any material or technology that meets or exceeds the performance criteria for such components established by the most recent Energy Star or International Energy Conservation Code (IECC) standards in effect at the time such component is placed in service.

In response to the comments and after consultation with the Department of Energy, the proposed regulations would clarify the definition of electrochromic glass property. Proposed § 1.48–9(e)(2)(ii) would adopt the statutory definition of electrochromic glass property while providing that light transmittance properties include both visible light and near infrared light. Additionally, as mentioned previously, proposed § 1.48–9(c)(2)(ii)(B) would adopt the performance and quality standards that new electrochromic windows must be rated in accordance with the NFRC and secondary glazing systems must be rated in accordance with the AERC Rating and Certification Process, or subsequent revisions. The application of these performance and quality standards are needed to ensure that the intended energy savings occurs from the installation of electrochromic glass property.

The Treasury Department and the IRS received comments requesting guidance concerning the eligible components of electrochromic glass property. Similar to the other energy properties, the proposed regulations would apply the functional interdependence test as described in part I.D.2 of this Summary of Comments and Explanation of Provisions to determine whether components are included as part of electrochromic glass property. This approach provides a technology-neutral way to determine what is considered included in the energy property that is broad enough to encompass technological changes. In the case of electrochromic glass property, for example, an electrochromic glass system includes the full controls package, the electrochromic glass coating, and the balance of window and installation components including glass, flashing, framing, and sealants.

3. Geothermal Energy Property

Section 48(a)(3)(A)(iii) provides that energy property includes geothermal property, and defines geothermal property as equipment used to produce, distribute, or use energy derived from a geothermal deposit (within the meaning of section 613(e)(2) of the Code), but only, in the case of electricity generated by geothermal power, up to (but not including) the electrical transmission stage.

Existing § 1.48–9(c)(10)(i) defines ''geothermal equipment'' as equipment that produces, distributes, or uses energy derived from a geothermal deposit. Existing § 1.48–9(c)(10) generally provides that geothermal property includes production and distribution equipment. Proposed § 1.48–9(e)(3)(i) would adopt this definitional framework by providing that geothermal energy property is equipment used to produce, distribute, or use energy derived from a geothermal deposit (within the meaning of section 613(e)(2)), and includes production equipment (as defined in proposed § 1.48–9(e)(3)(ii)) and distribution equipment (as defined in proposed § 1.48–9(e)(3)(iii)).

Proposed § 1.48–9(e)(3)(ii) would adopt a modified definition of production equipment from existing § 1.48–9(c)(10)(ii) in three respects. First, proposed § 1.48–9(e)(3)(ii) would provide, in part, that production equipment includes equipment necessary to bring geothermal energy from the subterranean deposit to the surface. Second, while existing § 1.48–9(c)(10)(ii) provides that reinjection wells required for production may qualify as production equipment, proposed § 1.48–9(e)(3)(ii) would expand the types of wells that may qualify as production equipment to production, injection, and monitoring wells. Third, proposed § 1.48–9(e)(3)(ii) would also include the electricity generating equipment as production equipment for those projects that convert geothermal energy to electricity.

Proposed § 1.48–9(e)(3)(iii) would adopt a modified definition of distribution equipment from existing § 1.48–9(c)(10)(iii). The existing regulations provide that distribution equipment includes components of a heating system, such as pipes and ductwork that distribute the energy derived from the geothermal deposit within a building. Proposed § 1.48–9(e)(3)(iii) would also add components of a building's heating or cooling system as distribution equipment. The proposed regulations would apply the functional interdependence test as described in part I.D.2 of this Summary of Comments and Explanation of Provisions to determine whether components are included as part of geothermal energy property.

In response to Notice 2015–70, one commenter requested that the regulations be modified to include as credit eligible costs incurred to drill failed or non-producing wells, and in some scenarios, for the margin or contingency that a subsidiary contractor requires to be paid to perform under an engineering, procurement, and construction (EPC) contract. While the proposed regulation would expand the types of wells that may be considered production equipment, it would not specifically include costs incurred to drill failed or non-producing wells. In many cases costs incurred to drill failed or non-producing geothermal wells are already recoverable through intangible drilling costs under § 1.612–5. It is also unclear whether the margin or contingency that a subsidiary contractor requires to be paid to perform under an EPC contract can be recovered by a taxpayer. However, if such costs are recoverable, such recovery would likely occur through capitalizing the costs to the underlying mineral interest and claiming depletion deductions under section 613(e). Therefore, the Treasury Department and the IRS have determined that these costs cannot be included in the basis of the geothermal energy property for purposes of calculating the section 48 credit.

4. Qualified Fuel Cell Property

Section 48(a)(3)(A)(iv) provides that energy property includes qualified fuel cell property. As modified by the IRA, section 48(c)(1) defines ''qualified fuel cell property'' as a fuel cell power plant that has a nameplate capacity of at least 0.5 kilowatt (kW) (1 kW in the case of a fuel cell power plant with a linear generator assembly) of electricity using an electrochemical process or electromechanical process and an electricity-only generation efficiency greater than 30 percent. Electricity-only generation efficiency may be calculated by dividing the heat rate of the fuel cell (for example, kilowatt-hours (kWh) electricity produced per kilogram (kg) of fuel consumed) by the higher heating value of the fuel (for example, kWh per kg). Section 48(c)(1)(C) defines the term ''fuel cell power plant'' as an integrated system comprised of a fuel cell stack assembly, or linear generator assembly, and associated balance of plant components that converts a fuel into electricity using electrochemical or electromechanical means.

The Treasury Department and the IRS received few comments regarding qualified fuel cell property in response to Notice 2022–49. As discussed, the

proposed regulations are intended to provide a technology-neutral way to determine what is included in energy property that is broad enough to encompass technological changes and do not include rules for a particular type of product. As a result, proposed § 1.48–9(e)(4) would adopt the statutory definition of qualified fuel cell property. The proposed regulations would also apply the functional interdependence test as described in part I.D.2 of this Summary of Comments and Explanation of Provisions to determine whether components are included as part of qualified fuel property.

5. Qualified Microturbine Property

Section 48(a)(3)(A)(iv) provides that energy property includes qualified microturbine property. Section 48(c)(2) defines ''qualified microturbine property'' as a stationary microturbine power plant that has a nameplate capacity of less than 2,000 kW and an electricity-only generation efficiency of not less than 26 percent at International Standard Organization conditions. Section 48(c)(2)(C) provides that a ''stationary microturbine power plant'' is an integrated system comprised of a gas turbine engine, a combustor, a recuperator or regenerator, a generator or alternator, and associated balance of plant components that convert a fuel into electricity and thermal energy. A stationary microturbine power plant also includes all secondary components located between the existing infrastructure for fuel delivery and the existing infrastructure for power distribution, including equipment and controls for meeting relevant power standards, such as voltage, frequency, and power factors.

The Treasury Department and the IRS received no comments regarding qualified microturbine property in response to the request for comment published in Notice 2022–49. Therefore, proposed § 1.48–9(e)(5) would adopt the statutory definition of qualified microturbine property. The proposed regulations would also apply the functional interdependence test as described in part I.D.2 of this Summary of Comments and Explanation of Provisions to determine whether components are included as part of qualified microturbine property.

6. Combined Heat and Power System Property

Section 48(a)(3)(A)(v) includes combined heat and power system (CHP) property as a type of energy property. Section 48(c)(3)(A) defines CHP property as property comprising a system that uses the same energy source for the simultaneous or sequential generation of electrical power, mechanical shaft power, or both, in combination with the generation of steam or other forms of useful thermal energy (including heating and cooling applications). Section 48(c)(3)(A) further provides, in part, that a CHP property must produce at least 20 percent of its total useful energy in the form of thermal energy that is not used to produce electrical or mechanical power (or combination thereof), and at least 20 percent of its total useful energy in the form of electrical or mechanical power (or combination thereof), and that the energy efficiency percentage of the system must exceed 60 percent.

Section 48(c)(3)(B) provides that the credit for CHP property is reduced to the extent that a CHP property has an electrical or mechanical capacity in excess of applicable limits. Subject to the exception for CHP property that uses closed or open-loop biomass as feedstock, CHP property with capacity in excess of the applicable capacity limit (15 MW or a mechanical capacity of more than 20,000 horsepower or an equivalent combination of electrical and mechanical energy capacities) is eligible for only a fraction of the otherwise allowable section 48 credit. The fraction is equal to the applicable capacity limit divided by the capacity of the CHP property. However, CHP property with a capacity in excess of 50 MW or a mechanical energy capacity in excess of 67,000 horsepower or an equivalent combination of electrical and mechanical energy capacities does not qualify for the section 48 credit.

Section 48(c)(3)(C) provides that the energy efficiency percentage of a CHP property is the fraction (1) the numerator of which is the total useful electrical, thermal, and mechanical power produced by the system at normal operating rates, and expected to be consumed in its normal application, and (2) the denominator of which is the lower heating value of the fuel sources for the system. The energy efficiency percentage and the percentages under section 48(c)(3)(A)(ii) are determined on a British thermal unit (Btu) basis. Section 48(c)(3)(C)(iii) specifically provides that the term ''combined heat and power system property'' does not include property used to transport the energy source to the facility or to distribute energy produced by the facility.

Additionally, section 48(c)(3)(D) provides that a CHP property with a fuel source that is at least 90 percent from closed or open-loop biomass that would otherwise qualify for the section 48 credit but for the failure to meet the efficiency standard is eligible for a credit reduced in proportion to the degree to which the system fails to meet the efficiency standard. For example, a system that would otherwise be required to meet the 60-percent efficiency standard, but which only achieves 30-percent efficiency, would be permitted to claim a credit equal to one-half of the otherwise allowable credit (that is, a five percent credit).

In response to Notice 2015–70, several commenters requested that the definition of CHP property be modified by relaxing certain requirements. Specifically, commenters requested that the definition of CHP property be modified by eliminating or reducing the requirement that a facility produce at least 20 percent of its total useful energy in the form of electrical or mechanical power (or combination thereof). This modification would allow waste heat to power (WHP) property, which uses waste heat from industrial processes to generate electricity, to qualify as CHP property despite its inability to meet certain statutory requirements. Since the comments to Notice 2015–70 were received, Congress amended section 48 by adding waste energy recovery property (WERP) as a type of energy property in the Consolidated Appropriations Act, 2021, Public Law 116–260, 134 Stat. 1182 (Dec. 27, 2020). Additional information on requirements for WERP is provided in part I.C.9 of this Summary of Comments and Explanation of Provisions.

Proposed § 1.48–9(e)(6)(i) would adopt a simplified version of the statutory definition of CHP property. Additionally, proposed § 1.48–9(e)(6)(ii) would provide that CHP property does not include property used to transport the energy source to the generating facility or to distribute energy produced by the facility. The proposed regulations would also apply the functional interdependence test as described in part I.D.2 of this Summary of Comments and Explanation of Provisions to determine whether components are included as part of CHP property.

7. Qualified Small Wind Energy Property

Section 48(a)(3)(A)(vi) provides that energy property includes qualified small wind energy property. Section 48(c)(4) defines qualified small wind energy property as property using a qualifying small wind turbine (which has a nameplate capacity of not more than 100 kW) to generate electricity. The Treasury Department and the IRS received no comments regarding qualified small wind energy property in response to Notice 2015–70.

Accordingly, proposed § 1.48–9(e)(7) would adopt the statutory definition of qualified small wind energy property. The proposed regulations would apply the functional interdependence test as described in part I.D.2 of this Summary of Comments and Explanation of Provisions to determine whether components are included as part of qualified small wind energy property.

8. Geothermal Heat Pump Equipment

Section 48(a)(3)(A)(vii) provides that energy property includes geothermal heat pump equipment. The statute provides, in part, that geothermal heat pump equipment is equipment that uses the ground or ground water as a thermal energy source to heat a structure or as a thermal energy sink to cool a structure. The Treasury Department and the IRS received no comments regarding geothermal heat pump equipment in response to Notice 2015–70. As a result, proposed § 1.48–9(e)(8) would adopt the statutory definition of qualified geothermal heat pump equipment while providing the modification that in addition to the ground and ground water, other underground working fluids may be used as a thermal energy source or as a thermal energy sink. The proposed regulations would apply the functional interdependence test as described in part I.D.2 of this Summary of Comments and Explanation of Provisions to determine whether components are included as part of geothermal heat pump equipment.

Additionally, while section 48(a)(3)(A)(vii) does not specify energy distribution equipment and components of a building's heating and/or cooling system as components of geothermal heat pump equipment, such equipment may be integral to the function of the geothermal heat pump equipment, to heat or cool a structure. Thus, energy distribution equipment may be considered geothermal heat pump equipment. See section I.E.3. of this preamble for a discussion of an integral part of energy property.

9. Waste Energy Recovery Property (WERP)

Section 48(a)(3)(A)(viii) provides that energy property includes WERP. Section 48(c)(5)(A) defines WERP as property (with a capacity not in excess of 50 MW) that generates electricity solely from heat from buildings or equipment if the primary purpose of such building or equipment is not the generation of electricity. Additionally, section 48(c)(5)(C) prevents taxpayers from claiming a double benefit by providing that any property that could be treated as WERP (determined without regard to section 48(c)(5)), which is part of a CHP property is not treated as WERP for purposes of section 48 unless the taxpayer elects not to treat such system as a CHP property for purposes of section 48.

Proposed § 1.48–9(e)(9), would adopt the statutory definition of WERP. The proposed regulations would also apply the functional interdependence test as described in part I.D.2 of this Summary of Comments and Explanation of Provisions to determine whether components are included as part of WERP. Additionally, after consultation with the Department of Energy, proposed § 1.48–9(e)(9) would provide examples of buildings or equipment the primary purpose of which is not the generation of electricity including, but not limited to, manufacturing plants, medical care facilities, facilities on college campuses, pipeline compressor stations, and associated equipment.

10. Energy Storage Technology

Section 48(a)(3)(A)(ix) was added by the IRA to provide that energy property includes energy storage technology. Section 48(c)(6)(A)(i) defines energy storage technology to mean property (other than property primarily used in the transportation of goods or individuals and not for the production of electricity) that receives, stores, and delivers energy for conversion to electricity (or, in the case of hydrogen, that stores energy), and has a nameplate capacity of not less than 5 kWh. Section 48(c)(6)(A)(ii) provides that thermal energy storage property is also energy storage technology.

Section 48(c)(6)(B) provides a rule for modifications of energy storage technology. In the case of any property that either was placed in service before August 16, 2022, and would be described in section 48(c)(6)(A)(i), except that such property has a capacity of less than 5 kWh and is modified in a manner that such property (after such modification) has a nameplate capacity of not less than 5 kWh, or is energy storage technology (as described in section 48(c)(6)(A)(i)) and is modified in a manner that such property (after such modification) has an increase in nameplate capacity of not less than 5 kWh, such property is treated as energy storage technology (as described in section 48(c)(6)(A)(i)) except that the basis of any existing property prior to such modification is not taken into account for purposes of section 48.

Section 48(c)(6)(C) defines thermal energy storage property, for purposes of section 48(c)(6) as property comprising a system that: is directly connected to a heating, ventilation, or air conditioning system; removes heat from, or adds heat to, a storage medium for subsequent use; and provides energy for the heating or cooling of the interior of a residential or commercial building. Section 48(c)(6)(C)(ii) provides that thermal energy storage property does not include a swimming pool, a combined heat and power system property, or a building or its structural components.

The Treasury Department and the IRS received comments addressing energy storage technologies in response to Notice 2022–49. Some comments discussed the definition of energy storage technology and how broadly energy storage technology should be interpreted in the regulations. For example, a commenter requested that guidance define energy storage broadly based on its characteristics and capabilities, rather than using a technology-based definition that could unintentionally exclude developing technologies. Some commenters requested that the definition of energy storage technology focus more on capability and less on a particular technology. Other commenters requested confirmation that certain specific technologies would be included within the definition of energy storage technology and that the definition be based on the underlying definition for the technology provided in section 48(c)(6), as opposed to the specific functionalities of the energy storage technology. After consideration of these comments, proposed § 1.48–9(e)(10) would adopt the statutory definition of energy storage technology.

Commenters also provided input on hydrogen storage, including a variety of recommendations on what the definition of hydrogen storage property should include. For example, one commenter suggested that ''energy storage technology'' with respect to hydrogen storage includes all equipment, facilities, storage receptacles, dedicated vehicles and vessels used to compress, liquify, store, and distribute hydrogen and hydrogen carriers, such as ammonia, methanol, and other forms of hydrogen carriers. Another commenter requested that regulations include a broad list of components of energy storage technologies including the storage receptacle itself and all pressure vessels, piping, valves, and tanks among many other components. This commenter also suggested that property that facilitates use of ammonia, methanol and other hydrogen carriers be included as hydrogen energy storage technology. Another commenter noted that the regulations should provide specific use limitations for stored hydrogen such as

for use solely in energy-related activities.

Section 48(c)(6)(A) already defines energy storage technology (including hydrogen storage) and thermal energy storage property based on the general functions of the relevant energy storage technology. Hydrogen energy storage property must store hydrogen that is solely used for the production of energy and not for the production of end products, such as fertilizer. For example, this would include, but is not limited to, hydrogen used to produce heat, to generate electricity, or to be used in a fuel cell vehicle. The type of hydrogen storage medium (for example, physical based or material based), is not limited. Proposed § 1.48–9(e)(10)(iv) therefore would adopt that rule. The Treasury Department and the IRS request comments on alternative approaches to assessing limitations on the use of hydrogen energy storage property, including whether additional clarification is needed regarding the production of energy from hydrogen, and what type of documentation would be needed to demonstrate that a hydrogen energy storage property was used to store hydrogen solely used for the production of energy.

Proposed § 1.48–9(e)(10) would apply the functional interdependence test as described in part I.D.2 of this Summary of Comments and Explanation of Provisions to determine whether components are included as part of an energy storage technology. This approach provides a technology-neutral way to determine what is considered energy storage technology and is broad enough to encompass technological changes. The proposed regulations would, however, provide additional guidance in the form of a non-exclusive list of examples of different types of energy storage technologies. The list is non-exclusive because it would be impossible to list all the types of technologies that could qualify currently, and the Treasury Department and the IRS acknowledge the importance of leaving the language broad to allow future technological advances in energy storage technologies to qualify.

Additionally, rechargeable electrochemical batteries of all types meet the functional definition by receiving energy in the form of electricity, storing electro-chemical energy, and producing electricity. A commenter requested that re-used or ''second life'' batteries should be considered ''new energy property.'' Generally, used property cannot be considered ''new property'' for purposes of the 80/20 Rule, which is described in part III.A. of this Summary of Comments and Explanation of Provisions. However, proposed § 1.48–9(e)(10)(v) would provide that recycled components may be used to meet the modification rule for energy storage technology. The Treasury Department and the IRS request comments on whether ''second life'' batteries should be considered new components for purposes of the 80/20 Rule. Additionally, the Treasury Department and the IRS request comment on what types of components may be used to modify an existing energy storage technology, and whether there are any challenges with recycled components being used to meet the modification rule.

Energy storage technology excludes property primarily used in the transportation of goods or individuals and not for the production of electricity under section 48(c)(6)(A)(i). The Treasury Department and the IRS understand that this exclusion, at a minimum, would apply to batteries and other energy storage technology that are incorporated into or otherwise physically integrated within motor vehicles and other modes of transportation of goods or individuals and from which an electric motor of such vehicle or other mode of transportation draws electricity for propulsion. The Treasury Department and the IRS do not intend that this exclusion apply to batteries and other energy storage technology that may be used to charge or recharge such vehicles or other modes of transportation, if the batteries and other energy storage technologies are physically separate from such vehicles or other modes of transportation. The Treasury Department and the IRS request comments as to how the exclusion for property primarily used in the transportation of goods or individuals and not for the production of electricity should be defined and the specific types of property that may be covered or not covered by this exclusion.

Although the list of examples of energy storage technologies that proposed § 1.48–9(e)(10) would provide is nonexclusive, and therefore many other technologies that are not addressed would meet these functional definitions, there are some examples that do not meet the functional definition. For example, some technologies are marketed as ''virtual batteries,'' which are aggregations of controllable electricity demand providing similar electrical grid services to an electrical grid battery. Such ''virtual batteries'' receive energy in the form of electricity, but they do not store it for later discharge as electricity. The function of ''virtual batteries'' is to shift demand to different points in time. Because such demand shifting is not a storage activity for purposes of section 48(c)(6), this technology is not an energy storage technology. There are other technologies for which the determination of whether they meet the statutory requirements of section 48(c)(6) is less clear. The Treasury Department and the IRS request comments on whether these other types of technologies should be considered energy storage technologies.

11. Qualified Biogas Property

Section 48(a)(3)(A)(x) was added by the IRA to provide that energy property includes qualified biogas property. Section 48(c)(7)(A) defines qualified biogas property as property comprising a system that converts biomass (as defined in section 45K(c)(3), as in effect on the date of enactment of section 48(a)(3)(A) (August 16, 2022)) into a gas that consists of not less than 52 percent methane by volume, or is concentrated by such system into a gas that consists of not less than 52 percent methane, and captures such gas for sale or productive use, and not for disposal via combustion. Section 48(c)(7)(B) provides that qualified biogas property includes any property that is part of such system that cleans or conditions such gas.

In response to Notice 2022–49, the Treasury Department and the IRS received several comments regarding qualified biogas property. Many commenters supported adopting a broad definition of qualified biogas property to include all the related technologies that commenters stated could be utilized in qualified biogas property. After consideration of these comments, proposed § 1.48–9(e)(11) would adopt the statutory definition of qualified biogas property.

Additionally, at least one commenter stated that when gas is being upgraded and injected into a pipeline, upgrading equipment is necessary to condition the gas into the appropriate mixture for injection into the pipeline and should be part of the qualified biogas property. In the commenter's view, the eligibility of this upgrading equipment hinges on the meaning of the phrase ''captures such gas for sale or productive use.'' The commenter asserted that the statute should encompass such conversion of biogas to a more portable product such as a compressed or liquified gas. Therefore, the commenter asserted that upgrading equipment be included in a qualified biogas property because it captures such biogas for sale or

productive use and includes any property that is part of such qualified biogas property that cleans or conditions such gas.

After consideration of these comments, proposed § 1.48–9(e)(11) would provide that components of property are considered qualified biogas property if they are functionally interdependent, that is, if the placing in service of each component is dependent upon the placing in service of each of the other components in order to perform the intended function of the qualified biogas property as described in proposed § 1.48–9(e)(11)(i). This approach would provide a technology-neutral way to determine what is considered included in a qualified biogas property and is broad enough to encompass technological changes. Additionally, proposed § 1.48–9(e)(11)(i) provides examples of functionally interdependent components of the qualified biogas property including, but not limited to, a waste feedstock collection system, a landfill gas collection system, mixing or pumping equipment, and an anaerobic digester.

Regarding the upgrading equipment that is necessary to condition biogas into the appropriate mixture for injection into the pipeline, this equipment is not functionally interdependent with the qualified biogas property that converts biomass into a gas containing not less than 52 percent methane and captures such gas for sale or productive use as specified in the statute. While this upgrading equipment makes the injection of biogas into a pipeline possible, such upgrading equipment is not necessary to satisfy the statutory requirements that the biogas converted from biomass contain not less than 52 percent methane, and that it be captured for sale or productive use. In support of including upgrading equipment necessary to prepare the biogas for injection into the pipeline, commenters point to the statutory language that qualified biogas property includes any property that is part of such system that *cleans or conditions such gas.* However, unlike upgrading equipment that is necessary for injection of the biogas into the pipeline, cleaning and conditioning equipment is part of the necessary process to convert biomass into gas that is not less than 52 percent methane and capture gas for sale or productive use. Therefore, proposed § 1.48–9(e)(11)(i) would clarify that upgrading equipment is not a functionally interdependent component of qualified biogas property. The Treasury Department and the IRS request comments regarding what types of components may be included within the definition of cleaning and conditioning property provided in the definition of qualified biogas property in section 48(c)(7)(B).

One commenter had recommendations about the application of the requirement in section 48(c)(7)(A)(ii) that a qualified biogas property captures such gas for sale or productive use, and not for disposal via combustion. This commenter noted that some properties that produce electricity from gas using a combustion process, may flare waste or tail gas, including during commissioning or maintenance periods. The commenter recommended a *de minimis* exception so that sale or use of gas in this manner will not prevent a property that produced such gas from being a qualified biogas property. The Treasury Department and the IRS request additional comments on whether such an exception is necessary and what should be considered *de minimis* for this purpose.

Lastly, several comments addressed the methane requirements in the statutory definition by commenting on how and when methane content should be measured and whether methane monitoring is required. After consideration and coordination with the Department of Energy, the proposed regulations would adopt a rule addressing the production point at which methane content must be measured. Proposed § 1.48–9(e)(11)(ii) would provide that the methane requirements described in section 48(c)(7)(A)(i)(I) and section 48(c)(7)(A)(i)(II) are measured at the point at which gas exits the biogas production system (which may include an anerobic digester, landfill gas collectors, or thermal gasification equipment) of a qualified biogas property. This is the point at which a taxpayer generally must determine whether it will convert the biogas to fuel for sale or use it directly to generate heat or fuel an electricity generation unit.

12. Microgrid Controllers

Section 48(a)(3)(A)(xi) was added by the IRA to provide that energy property includes microgrid controllers. Section 48(c)(8)(A) defines a microgrid controller as equipment that is part of a qualified microgrid and designed and used to monitor and control the energy resources and loads on such microgrid. Section 48(c)(8)(B) defines a qualified microgrid as an electrical system that includes equipment that is capable of generating not less than 4 kW and not greater than 20 MW of electricity; is capable of operating in connection with the electrical grid and as a single controllable entity with respect to such electrical grid, and independently (and disconnected) from such electrical grid; and is not part of a bulk-power system (as defined in section 215 of the Federal Power Act (16 U.S.C. 824o)).

In response to Notice 2022–49, the Treasury Department and the IRS received several comments requesting clarification on the definition of microgrid controllers, with some commenters suggesting a broad interpretation and others suggesting a narrow interpretation. Additionally, several commenters identified certain components that should be included as part of an eligible microgrid controller.

Several commenters asserted that the focus of the microgrid controller definition should be on capability and not the availability of an interconnection with the utility grid. In response to these comments, proposed § 1.48–9(e)(12)(ii) would clarify that an eligible microgrid includes an electrical system that is capable of operating in connection with the larger electrical grid whether or not the microgrid is physically connected to the electrical grid. For example, a microgrid located in a remote area that does not have a larger electrical grid to which it can physically connect can still be a qualified microgrid.

After consideration of these comments, proposed § 1.48–9(e)(12)(i) would adopt the statutory definition of a microgrid controller. The Treasury Department and the IRS request comments on whether the rules for functionally interdependent property provided in proposed § 1.48–9(f)(2)(ii) would be sufficient to determine the components that should be included as part of a microgrid controller, or whether another test is needed due to the specific role of microgrid controllers and their components.

13. Other Property Included in Section 48

Because future legislation may add additional types of energy property to section 48, proposed § 1.48–9(e)(13) would provide that any other property specified by section 48 as energy property is treated as energy property for purposes of these proposed regulations. The general rules and requirements applicable to energy property provided in these proposed regulations would also apply to such property.

D. Definition of Energy Property and Scope of Included Components

Since shortly after the enactment of section 48, energy property eligible for the section 48 credit has been

interpreted by the Treasury Department and the IRS to include, in addition to energy generation property, costs related to components such as power conditioning equipment, transfer equipment, and parts related to the functioning of that equipment.

On November 9, 1978, the Energy Tax Act of 1978, amended section 48 by adding a new subsection (then section 48(l)) to define ''energy property.'' Public Law 95–816, 92 Stat. 2174. On January 23, 1981, the Treasury Department and the IRS promulgated T.D. 7765 to provide additional guidance regarding the definition of energy property. 46 FR 7287–01. The preamble to T.D. 7765 states that ''[i]n response to comments, 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. However, such equipment does not include transmission equipment.''

The preamble to T.D. 7765 also provides that ''[a] number of comments cited specific legislative history to the effect that wind energy property includes 'transfer equipment.' '' The preamble to T.D. 7765 defines ''transfer equipment'' as including equipment that permits the aggregation of electricity generated by several windmills and equipment that alters voltage in order to permit transfer to a transmission line. The preamble to T.D. 7765 concludes that transfer equipment is specifically added to the definition of wind energy property, however, transfer equipment does not include transmission lines.

Existing § 1.48–9(d)(3) defines ''solar energy property'' as equipment that uses solar energy to generate electricity, and includes storage devices, power conditioning equipment, transfer equipment, and parts solely related to the functioning of those items. This section also provides that solar energy property used to generate electricity includes only equipment up to (but not including) the stage that transmits or uses electricity.

Existing § 1.48–9(e) defines ''wind energy property'' as consisting of a windmill, wind-driven generator, storage devices, power conditioning equipment, transfer equipment, and parts solely related to the functioning of those items. Section 48(a)(3) no longer includes wind energy property as a type of energy property. However, qualified wind facilities (including qualified offshore wind facilities) may be qualified investment credit facilities that a taxpayer may elect to treat as energy property if they meet all the requirements provided in section 48(a)(5).

While not specifically addressed in section 48, Internal Revenue Bulletin guidance interpreting section 48 has provided that functionally interdependent components, are considered components of energy property eligible for the section 48 credit. In Notice 2018–59, 2018–28 I.R.B. 196, the Treasury Department and the IRS clarified what components are considered part of an energy property. Section 7.01(1) of Notice 2018–59 states that an energy property generally includes all components of property that are functionally interdependent (unless such equipment is an addition or modification to an energy property). Notice 2018–59 provides that components of property are functionally interdependent if the placing in service of each component is dependent upon the placing in service of each of the other components in order to generate electricity. Further, Notice 2018–59 relies upon the rationale provided in Revenue Ruling 94–31, 1994–1 C.B. 16, to provide that functionally interdependent components of property that can be operated and metered together and can begin producing electricity separately from other components of property within a larger energy project will be considered an energy property.

In the context of defining ''section 38 property,'' § 1.48–1(d)(4) provides that ''section 38 property'' is ''used as an integral part of one of the specified activities if it is used directly in the activity and is essential to the completeness of the activity.'' Section 1.48–1(d)(4) also provides that ''[p]roperty shall be considered used as an integral part of one of the specified activities if so used either by the owner of the property or by the lessee of the property.'' Notice 2018–59 incorporates the concept of integral property from § 1.48–1(d) to provide that certain property that is an integral part of an energy property is included in energy property for purposes of the section 48 credit. While Notice 2018–59 explained that property that is ''functionally interdependent'' to the generation of electricity was treated as a unit of energy property, it also provided that certain other property that was integral to the production of electricity are included in determining what costs to include in the basis of energy property and the date on which construction began. Section 7.02(1) of Notice 2018–59 includes an example illustrating that, while a transmission tower located at a site where energy property is located is not energy property because transmission is not an integral part of the activity performed by the energy property, a custom-designed transformer that steps up the voltage of electricity produced at an energy property to the voltage needed for transmission is power conditioning equipment, which is an integral part of the activity performed. In addition, section 7.02(2) of Notice 2018–59 explains that onsite roads used to operate and maintain the energy property are integral to the production of electricity, but not roads used primarily to access the site or primarily for employee or visitor vehicles. Similarly, sections 7.02(3) and (4) of Notice 2018–59 explain that fences are not integral to the production of electricity nor are buildings, unless the building is essentially an item of machinery or equipment, or a structure that houses property that is integral to the activity of an energy property if the use of the structure is so closely related to the use of the housed energy property that the structure clearly can be expected to be replaced when the energy property it initially houses is replaced.

In response to a request for comments regarding the definition and scope of energy property in Notice 2015–70, several commenters requested that the regulations provide a specific list of eligible components and define each type of component. Commenters specifically requested that the regulations provide definitions for conversion equipment, power conditioning equipment, transfer equipment, and other property commonly used in conjunction with energy property. Further, some commenters requested that the regulations include safety equipment such as electrical panels, rapid shut-down equipment, and utility disconnection equipment as eligible components when used in conjunction with energy property. Conversely, several commenters recommended that the regulations not provide a technical definition or list of components because innovations in energy property may require that such a definition would need to be continually updated.

Commenters requested that the regulations be clarified to include as energy property all components located *before* the point at which voltage of the electricity is increased to the voltage of the transmission line, referred to as the ''separation point,'' such as step-up transformers, dead end structures, switches, switch gear buildings, voltage regulators, and hardware and software used to monitor, operate, and protect such property. Additionally, one commenter requested that the

regulations be clarified to include as energy property all components located beyond the separation point, such as switches, circuit breakers, lighting or surge arrestors, and metering equipment, if the use of such components is primarily related to the functioning or protection of components located at or before the separation point.

One challenge in providing definitions of what components to include in energy property is in determining what components are common to all energy property, without limiting or constraining future technological advances. To avoid limiting future energy technologies, the Treasury Department and the IRS consulted with the Department of Energy and determined that the best option is to adopt a function-oriented approach to describe the types of components that are considered energy property. Accordingly, proposed § 1.48–9(f) would adopt the concepts of functional interdependence and property that is an integral part of an energy property as provided in Internal Revenue Bulletin guidance issued previously by the Treasury Department and the IRS.

1. Unit of Energy Property

Proposed § 1.48–9(f)(2)(i) would provide that a unit of energy property consists of all functionally interdependent components of property (as defined in proposed § 1.48–9(f)(2)(ii)) owned by the taxpayer that are operated together and that can operate apart from other energy properties within a larger energy project (as defined in proposed § 1.48–13(d) and discussed in part II.C of this Summary of Comments and Explanation of Provisions).

2. Functional Interdependence

Proposed § 1.48–9(f)(2)(ii) would provide that components of property are functionally interdependent if the placing in service of each component is dependent upon the placing in service of each of the other components in order to generate or to store electricity, thermal energy, or hydrogen, or otherwise perform its intended function as provided in section 48(c) and as described in proposed § 1.48–9(e). Energy property, with certain exceptions, includes all components necessary to generate or store electricity or thermal energy for transmission, distribution, or use up to (but not including) the stage that transmits, distributes, or uses electricity or thermal energy. In the case of qualified biogas property, microgrid controllers, electrochromic glass property, and fiber-optic solar energy property, components of such energy property are functionally interdependent if the placing in service of each component is dependent upon the placing in service of each of the other components in order to perform the intended function of the energy property as provided by section 48(c) and as described in proposed § 1.48–9(e). Additionally, energy property generally would not include equipment that is an addition or modification to an existing energy property unless the rules regarding retrofitted energy property described in proposed § 1.48–14(a) and part III.A. of this Summary of Comments and Explanation of Provisions apply.

3. Integral Part of an Energy Property

Proposed § 1.48–9(f)(3)(i) would provide that property owned by a taxpayer that is an integral part of an energy property owned by that same taxpayer is energy property. To be part of an energy property, such property must be used directly in the intended function of the energy property as provided by section 48(c) and as described in § 1.48–9(e) and be essential to the completeness of the intended function. Proposed § 1.48–9(f)(3)(ii) would describe power conditioning equipment and transfer equipment, and would provide that such components, and parts related to the functioning of those components, are energy property when they meet the definition of integral part provided in § 1.48–9(f)(3)(i).

Many commenters requested clarification on the eligible components of an offshore wind facility. Proposed § 1.48–9(f)(5)(iii) would provide an example that applies the integral part rule to include power conditioning and transfer equipment as part of a qualified offshore wind facility but excludes transmission and distribution equipment from being part of the qualified offshore wind facility. This example is consistent with the view of the Joint Committee on Taxation in the *General Explanation of Tax Legislation Enacted in the 116th Congress,* JCS 1–22 (February 2022). According to that document, ''[q]ualified offshore wind facilities are qualified wind facilities . . . and include property owned by the taxpayer necessary to condition electricity for use on the electrical grid such as subsea cables and voltage transformers.'' *Id.* at 498.

Furthermore, consistent with Notice 2018–59, proposed § 1.48–9(f)(3)(iii) would provide as further examples of integral property onsite roads that are used for equipment to operate and maintain the energy property. Section 1.48–9(f)(3)(iii) would also clarify that roads primarily for access to the site, or roads used primarily for employee or visitor vehicles, are not integral parts of an energy property. Proposed § 1.48–9(f)(3)(iv) and (v) would also provide that fences and buildings (also referred to as structures) are generally not integral parts of an energy property because they are not integral to the activity of the energy property. However, a building may be an integral part of a unit of energy property if it is essentially an item of machinery or equipment, or a structure that houses property that is integral to the activity of an energy property, if the use of the structure is so closely related to the use of the housed energy property that the structure clearly can be expected to be replaced when the energy property it initially houses is replaced. The Treasury Department and the IRS request comments on whether additional types of property meet the requirements provided in proposed § 1.48–9(f)(3) and could be considered an integral part of an energy property.

4. Location of Energy Property

Section 48 and the existing regulations thereunder are silent regarding the credit eligibility of components of an energy property located in different locations. However, the Treasury Department and the IRS have provided analogous guidance regarding the credit eligibility of offsite components for the residential energy efficient property tax credit under section 25D of the Code (section 25D credit).

In Notice 2013–70, 2013–47 I.R.B. 528, the Treasury Department and the IRS provided guidance addressing the eligibility for the section 25D credit for offsite components of solar electric property. Specifically, Q&A #25 of Notice 2013–70 addressed the issue of whether a taxpayer that installs solar panels as part of solar electric property other than directly on the taxpayer's home may claim the section 25D credit. Q&A #25 concluded that the taxpayer would be able to claim the section 25D credit because the solar electric property expenditure was made for property that, consistent with the requirements of the section 25D credit, uses solar energy to generate electricity for use in a dwelling unit that is used as a residence by the taxpayer. The fact that the solar panels were not directly located on the taxpayer's home did not change the analysis or the eligibility of the taxpayer's expenditure for purposes of the section 25D credit.

Similarly, Q&A #26 of Notice 2013–70 addressed a scenario in which a taxpayer purchases solar panels that are

placed on an offsite solar array (community solar project) and connected to the local public utility's electrical grid that supplies electricity to the taxpayer's residence. The taxpayer enters into a direct contractual arrangement with the utility to allow the taxpayer to provide electricity to the electrical grid using a net metering system that measures the amount of electricity produced by the taxpayer's solar panels and transmitted to the electrical grid and the amount of electricity used by the taxpayer's residence and drawn from the electrical grid. The contract states that the taxpayer owns the electricity transmitted by the solar panels to the electrical grid until drawn from the electrical grid at his residence. Q&A #26 determined that offsite solar panels under this type of contractual arrangement with a utility that supplies electricity to the taxpayer's residence also meet the definition of a solar electric property expenditure eligible to claim the section 25D credit. In response to Notice 2015–70, many commenters referenced Notice 2013–70 when requesting that existing § 1.48–9 be modified to allow components of energy property to be situated in different locations without affecting the eligibility of the energy property for the section 48 credit.

After consideration of the comments received, the Treasury Department and the IRS have determined that if property is a functionally interdependent part of an energy property (as defined in § 1.48–9(f)(2)(ii)), or an integral part of an energy property (as defined in § 1.48–9(f)(3)(i)), such property is part of an energy property regardless of where it is located. Proposed § 1.48–9(f)(4) would adopt this position.

5. Property Excluded From Energy Property

Proposed § 1.48–9(d)(2) would also clarify that certain types of intangible property, such as power purchase agreements, renewable energy certificates, goodwill, and going concern value, are not energy property because they are not functionally interdependent with other components of an energy property as defined in proposed § 1.48–9(f)(2)(ii) and are not an integral part of an energy property as defined in proposed § 1.48–9(f)(3)(i).

II. Rules Relating to the Increased Credit Amount for Prevailing Wages and Apprenticeships

The IRA amended several sections of the Code including section 48 to provide increased credit amounts for taxpayers who satisfy certain requirements, including an increased credit amount for satisfying prevailing wage and apprenticeship (PWA) requirements. This same increased credit amount is also generally available under certain sections of the Code including section 48 with respect to energy projects with a maximum net output of less than one megawatt (One-Megawatt Exception). Additionally, this same increased credit amount is available under certain sections of the Code including section 48 if beginning of installation or beginning of construction (BOC) occurs before January 29, 2023 (BOC Exception).

The Treasury Department and the IRS issued proposed § 1.48–13 as part of the August Proposed Regulations to provide guidance concerning the increased credit amount available for taxpayers satisfying the PWA requirements. This notice of proposed rulemaking withdraws § 1.48–13 as proposed in the August Proposed Regulations and reproposes in a new § 1.48–13 (proposed § 1.48–13) the substance of the withdrawn rules with minor changes and additional rules with respect to the increased credit amount available for taxpayers under section 48(a)(9).

Proposed § 1.48–13 would provide special rules affecting the basis of energy property that include: (i) the definition of an energy project for purposes of the PWA requirements as well as other delineated purposes discussed in part II.C of this Summary of Comments and Explanation of Provisions and (ii) guidance concerning the One-Megawatt Exception discussed in part II.D of this Summary of Comments and Explanation of Provisions. These proposed regulations also provide guidance on the recapture rules under section 48(a)(10)(C) applicable to failures to satisfy the PWA requirements.

A. General Rules

For properties placed in service after December 31, 2022, the section 48 credit is generally six percent of the basis of energy property described in section 48(a)(2)(A)(i) and two percent of the basis of energy property described in section 48(a)(2)(A)(ii). If a taxpayer satisfies the PWA requirements, the One-Megawatt Exception, or the BOC Exception, then the section 48 credit for the basis of each energy property placed in service during the taxable year is multiplied by five.

To satisfy the prevailing wage requirements under section 48(a)(10)(A) and (B) (Prevailing Wage Requirements), a taxpayer must ensure that any laborers and mechanics employed by the taxpayer or any contractor or subcontractor in: (i) the construction of any energy project, and (ii) the alteration or repair of that energy project (for the five-year period beginning on the date such project is originally placed in service), are paid wages at rates not less than the prevailing rates for construction, alteration, or repair of a similar character in the locality in which that energy project is located as most recently determined by the Secretary of Labor, in accordance with subchapter IV of chapter 31 of title 40, United States Code (Davis-Bacon Act). Section 48(a)(10)(B) provides that rules similar to the rules of section 45(b)(7)(B) apply for purposes of the correction and penalty related to the failure to satisfy the Prevailing Wage Requirements.

Section 48(a)(10)(C) provides a recapture rule applicable to failures to satisfy the Prevailing Wage Requirements with respect to alterations or repairs that occur during the five-year period after the energy project is placed in service (section 48(a)(10)(C) recapture). Specifically, section 48(a)(10)(C) instructs the Secretary, by regulations or other guidance, to provide for recapturing the benefit of any increase in the credit allowed by the Prevailing Wage Requirements with respect to failures to satisfy the Prevailing Wage Requirements during the five-year period after the energy project is placed in service. Section 48(a)(10)(C) clarifies that the failures during the five-year period remain subject to the correction and penalty provisions in section 45(b)(7)(B) (as referenced in section 48(a)(10)(B)) and provides that the period and percentage of the credit that is recaptured is determined under rules similar to the rules in section 50(a). Subject to the section 48(a)(10)(C) recapture (including the correction and penalty provisions in section 45(b)(7)(B)), the taxpayer is deemed at the time the energy project is placed in service to satisfy the Prevailing Wage Requirements for alterations or repairs for the five-year period beginning after such project is originally placed in service. Section 48(a)(11) provides that rules similar to the rules of section 45(b)(8) apply for purposes of the apprenticeship requirements.

The August Proposed Regulations provided guidance for taxpayers claiming an increased credit amount under section 48(a)(9)(A)(i) with respect to an energy project that satisfies the PWA requirements, the One-Megawatt Exception, or the BOC Exception. The August Proposed Regulations provided that to satisfy the PWA requirements, the energy project must meet the

Prevailing Wage Requirements of section 48(a)(10)(A) and proposed § 1.45–7(b)–(d), the apprenticeship requirements of section 45(b)(8) and proposed § 1.45–8, and the recordkeeping and reporting requirements of proposed § 1.45–12. In addition, under the August Proposed Regulations, to satisfy the Prevailing Wage Requirements with respect to section 48(a)(10)(A)(ii), a taxpayer also would be required to ensure that any laborer and mechanic employed by the taxpayer or any contractor or subcontractor in the construction of any energy project, as well any alteration or repair of an energy project in the five-year period beginning on the date a project is placed in service, are paid wages at rates not less than the prevailing rates for construction, alteration, or repair of a similar character in the locality in which the energy project is located in accordance with the Davis-Bacon Act. The August Proposed Regulations also provided that the increased credit amount was subject to section 48(a)(10)(C) recapture for any project that failed to satisfy the Prevailing Wage Requirements in proposed § 1.45–7 with respect to an alteration or repair of such project for the five-year period beginning on the date such project is originally placed in service (but that does not cease to be investment credit property within the meaning of section 50(a) of the Code).

B. Section 48(a)(10)(C) Recapture Rules

The Treasury Department and the IRS have determined that additional guidance on the section 48(a)(10)(C) recapture rules is necessary. Proposed § 1.48–13 would provide additional guidance on the section 48(a)(10)(C) recapture rules related to the Prevailing Wage Requirements. The proposed regulations also provide other minor technical corrections to the August Proposed Regulations.

In addition to largely restating the general rules in the August Proposed Regulations, proposed § 1.48–13 would clarify that a taxpayer that has claimed an increased credit amount under section 48(a)(9)(A)(i) and 48(a)(9)(B)(iii) but failed to satisfy the Prevailing Wage Requirements set forth in proposed § 1.45–7(b)–(d) with respect to any period during the five-year period beginning on the date a project is placed in service is subject to section 48(a)(10)(C) recapture of a portion (up to 100 percent) of the increased credit amount. Proposed § 1.48–13 would also clarify that the failure to satisfy the Prevailing Wage Requirements in proposed § 1.45–7(b)–(d) with respect to any period during the five-year period beginning on the date a project is placed in service remains subject to the correction and penalty provisions in proposed § 1.45–7(c)(1).

Section 48(a)(10)(C) requires that the recapture period and percentage of such recapture be determined under rules similar to the rules of section 50(a). Consistent with that requirement, proposed § 1.48–13 would also clarify that the five-year recapture period under section 48(a)(10)(C) would begin on the day an energy project is placed in service and end on the day that is five full years after the placed-in-service date. Proposed § 1.48–13 would also provide that each 365-day period (366-day period in case of a leap year) within the recapture period is a separate recapture year. The proposed regulations would provide that the recapture amount is determined consistent with the percentages set forth in section 50(a) based on the year in which the section 48(a)(10)(C) recapture event is determined to have occurred.

The Treasury Department and the IRS understand that the five-year recapture period is unlikely to align with a taxpayer's taxable year. The proposed regulations would provide that whether a section 48(a)(10)(C) recapture event has occurred is determined at the close of taxable year that begins or ends within the five-year recapture period. In addition to the reporting and recordkeeping requirements contained in proposed § 1.45–12, the proposed regulations would provide for an annual information reporting requirement that verifies compliance with the Prevailing Wage Requirements following the close of each recapture year consistent with the forms and instructions prescribed by the IRS. The IRS anticipates that the annual compliance reporting obligation will be made at the time the taxpayer files its income tax or other annual return following the close of each recapture year.

Under proposed § 1.48–13, if the increased credit amount is subject to section 48(a)(10)(C) recapture, then the increase in tax under chapter 1 for the recapture of the increased credit amount would be assessed with respect to the taxable year in which the section 48(a)(10)(C) recapture event occurred. The proposed regulations also clarify that a taxpayer whose increased credit amount is subject to section 48(a)(10)(C) recapture may still be entitled to the base amount of the energy credit under section 48(a) if they meet the requirements to claim the credit. Additionally, the proposed regulations clarify the application of the transferability rules under section 6418 to a section 48(a)(10)(C) recapture event and include a proposed addition to § 1.6418–5 confirming the notification requirements for an eligible taxpayer and that a transferee taxpayer is responsible for any amount of tax increase under section 48(a)(10)(C).

C. Definition of Energy Project

Under section 48(a)(9)(A)(ii), an energy project is a project consisting of one or more energy properties that are part of a single project. Proposed § 1.48–13(d) would provide a definition of ''energy project'' for purposes of the increased credit amount for the PWA requirements (provided by section 48(a)(9)), the domestic content bonus credit amount (provided by section 48(a)(12)), and the increase in credit rate for energy communities (provided in section 48(a)(14)). For these purposes, the term *energy project* means one or more energy properties that are operated as part of a single project. Section 45 qualified facilities that are co-located with section 48 energy property will not be considered part of an energy project (unless they elect under section 48(a)(5) to be treated as energy property). Multiple energy properties would be treated as one energy project, if at any point during the construction of the multiple energy properties, they are owned by a single taxpayer (subject to the related taxpayer rule discussed later in this part) and any two or more of the following factors (also set forth in section 7.01(2)(a) of Notice 2018–59 as factors indicating that multiple energy properties are operated as part of a single project) are present:

1. The energy properties are constructed on contiguous pieces of land;
2. The energy properties are described in a common power purchase, thermal energy, or other off-take agreement or agreements;
3. The energy properties have a common intertie;
4. The energy properties share a common substation, or thermal energy off-take point;
5. The energy properties are described in one or more common environmental or other regulatory permits;
6. The energy properties are constructed pursuant to a single master construction contract; or
7. The construction of the energy properties are financed pursuant to the same loan agreement.

Under proposed § 1.48–13(d)(2), related taxpayers would be treated as one taxpayer in determining whether multiple energy properties are treated as an energy project. Related taxpayers would be defined as members of a group of trades or businesses that are under

common control (as defined in § 1.52–1(b)).

Proposed § 1.48–13(d)(3) would also provide that if multiple energy properties are treated as a single project for beginning of construction purposes with respect to the section 48 credit, the multiple energy properties would also be treated as one energy project for purposes of the PWA requirements, the domestic content bonus credit amount, and the increase in section 48 credit rate for energy communities. This rule would apply to an energy project for which construction begins after the date final regulations are published in the **Federal Register**.

D. One-Megawatt Exception

Section 48(a)(9)(B)(i) and § 1.48–13 of the August Proposed Regulations would provide that the increased credit amount is also available under section 48 with respect to energy projects with a maximum net output of less than 1 MW of electrical (as measured in alternating current) or thermal energy. The August Proposed Regulations do not address how to determine the maximum net output of a project.

The Department of Energy has advised the Treasury Department and the IRS that for energy projects that generate electricity, the determination of an energy project's nameplate capacity will provide the necessary guidance to determine the maximum electrical generating output in MWs of electrical (as measured in alternating current) or thermal energy that the unit is capable of producing on a steady state basis and during continuous operation under standard conditions. Proposed § 1.48–13(e) would thus provide a rule for the determination of nameplate capacity as expressed in MWs of electrical (as measured in alternating current) or thermal energy. Because electrochromic glass property, fiber-optic solar, and microgrid controllers do not generate electricity or thermal energy, these energy properties are not eligible for the One-Megawatt Exception. The Treasury Department and the IRS request comments on whether other methods of measurement may allow these energy properties to use the One-Megawatt Exception.

Under proposed § 1.48–13(e)(1), the nameplate capacity for an electrical generating unit would mean the maximum electrical generating output in MWs that the unit is capable of producing on a steady-state basis and during continuous operation under standard conditions, as measured by the manufacturer and consistent with the definition provided in 40 CFR 96.202. Where applicable, those rules provide that the International Standard Organization (ISO) conditions are used to measure the maximum electrical generating output.

Proposed § 1.48–13(e)(2) through (4) would provide rules for energy storage technologies. Generally, electrical energy storage property would look to the storage device's nameplate capacity in MWs under proposed § 1.48–13(e)(2). As with energy properties that generate electricity, nameplate capacity for an electrical energy storage property would mean the maximum electrical generating output in MWs that the unit is capable of producing on a steady state basis and during continuous operation under standard conditions, as measured by the manufacturer and consistent with the definition provided in 40 CFR 96.202.

Proposed § 1.48–13(e)(3) would provide that for thermal energy storage property, taxpayers must use the equivalent value of 3.4 million British Thermal Units per hour (mmBtu/hour) for heating and 284 tons for cooling to determine whether the thermal energy storage property satisfies the One-Megawatt Exception (Btu per hour/3,412,140 = MW). The Treasury Department and the IRS request comments on whether these tests are suitable or whether another test should apply for measuring the One-Megawatt Exception for thermal energy storage property.

Proposed § 1.48–13(e)(4) would provide that for hydrogen energy storage property, 1 MW is equivalent to 3.4 mmBtu/hour, and using the higher heating value of hydrogen, this can be converted to 10,500 scf per hour. Therefore, proposed § 1.48–13(e)(4) would provide that for a hydrogen energy storage property to satisfy the One-Megawatt Exception, an eligible hydrogen producing, or hydrogen storage energy property must be designed to have a maximum net output of less than 3.4 mmBtu/hour of hydrogen or equivalently 10,500 scf per hour of hydrogen.

Proposed § 1.48–13(e)(3) through (5) would provide that to apply the One-Megawatt Exception to energy projects that produce thermal energy or fuels, taxpayers must use the equivalent value of 3.4 million British thermal units (mmBtus) per hour (Btu per hour/3,412,140 = MW). For certain technologies that produce fuels, such as qualified biogas property (proposed § 1.48–13(e)(5)), hydrogen energy storage property (proposed § 1.48–13(e)(4)), and specified hydrogen production facilities (as defined in section 48(a)(15)(C)) (proposed § 1.48–13(e)(4)), taxpayers may use equivalent maximum fuel volume flows in standard cubic feet (scf) per hour to assess the One-Megawatt Exception. Taxpayers can use equivalent volume flows using the default high heat value conversion factors found in *Table C–1 to Subpart C of Part 98, Title 40 of the Greenhouse Gas Reporting Rule* promulgated by the Environmental Protection Agency. Otherwise, taxpayers may calculate their own equivalent volumetric flow if the heat content of the gas is known.

For property generating thermal energy, proposed § 1.48–13(e)(3) would provide that the equivalents for 1 MW that should be used are 3.4 mmBtu/hour for heating and equivalently 284 tons for cooling should be used to determine whether the energy property satisfies the One-Megawatt Exception. Proposed § 1.48–13(e)(3) would also specify that for projects delivering thermal energy to a building or buildings, the One-Megawatt Exception can be assessed as either the aggregate maximum thermal output of all individual heating or cooling elements within the building or buildings or as the maximum thermal output that the entire project is capable of delivering to a building or buildings at any given moment.

III. Rules Applicable to Energy Property

A. Retrofitted Energy Property (80/20 Rule)

The Treasury Department and the IRS have published several pieces of Internal Revenue Bulletin guidance regarding the eligibility of retrofitted equipment added to qualified facilities and energy property for purposes of the section 45 and 48 credits. In Notice 2016–31, 2016–23 I.R.B. 1025, the Treasury Department and the IRS considered the application of the Five Percent Safe Harbor provided in section 5.01 of Notice 2013–29, 2013–20 I.R.B. 1085, to retrofitted qualified facilities for purposes of applying the beginning of construction requirement to the section 45 credit. Section 6.01 of Notice 2016–31 cites to Revenue Ruling 94–31 and Notice 2008–60, 2008–2 C.B. 178, for the concept that a qualified facility may qualify as originally placed in service even though it contains some used property, provided the fair market value of the used property is not more than 20 percent of the qualified facility's total value (that is, the cost of the new property plus the value of the used property). This concept has become known as the ''80/20 Rule.''

Similarly, Notice 2018–59 addressed the application of the 80/20 Rule to retrofitted energy property for purposes

of the applying the beginning of construction rules to the section 48 credit. Section 7.05(1) of Notice 2018–59 provides that retrofitted energy property may qualify as originally placed in service even though it contains some used components of property, provided it satisfies the 80/20 Rule. Further, this section of the notice provided that, for purposes of the 80/20 Rule, the cost of the new energy property includes all properly capitalized costs of the new energy property.

In response to requests for comment in Notice 2015–70 and Notice 2022–49, several commenters requested that the regulations address the applicability of the 80/20 Rule to energy property for purposes of the section 48 credit. After consideration of the comments, proposed § 1.48–14(a) would apply the 80/20 Rule to energy property for purposes of the section 48 credit.

B. Dual Use Property

Existing § 1.48–9 includes a dual use equipment rule (Dual Use Rule). The preamble to T.D. 8147 notes that the regulations prior to amendment by T.D. 8147 required that equipment must use only energy from a single qualifying source (solar energy property, wind energy property, or geothermal equipment) to qualify as energy property. In changing from a single source rule to the Dual Use Rule, the preamble to T.D. 8147 explained that the Treasury Department and the IRS reconsidered the legislative history of the investment tax credit and 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.''

Accordingly, the Dual Use Rule in existing § 1.48–9 provides that a solar energy property, wind energy property, and geothermal equipment are eligible for the section 48 credit to the extent of the property's basis or cost allocable to its annual use of energy from a qualified source, provided the use of energy from ''non-qualifying'' sources does not exceed 25 percent of the total energy input of the property during an annual measuring period. Notably, the Dual Use Rule provided in § 1.48–9 also precludes an energy property from receiving and aggregating energy from a combination of qualifying sources (solar energy property, wind energy property, and geothermal equipment). Because the Dual Use Rule requires that a solar energy property, wind energy property, or geothermal equipment must use a minimum of 75 percent of energy from a qualified source during an annual measuring period to qualify for a section 48 credit. This rule became known as the ''75-percent Cliff.''

The Dual Use Rule provided in existing § 1.48–9 also provides that, if in the first annual measuring period, the applicable percentage (based on usage from a qualifying source) is between 75 percent and 100 percent, only a proportionate amount of the eligible basis of the energy property should be taken into account in computing the amount of the section 48 credit. If less than 75 percent of the energy used is from qualifying sources, then the eligible basis is zero, and the property is not eligible for the section 48 credit.

1. Alternatives to the 75-Percent Cliff

In response to Notice 2015–70, many commenters requested that the regulations be modified to reduce the Dual Use Rule's current 75-percent Cliff to a 50-percent Cliff. Commenters cited as support for this proposal the statutory language of section 25D(d)(1), which allows for full credit eligibility if a solar water heating property receives at least 50 percent of its energy inputs from the sun. Applying this premise to the investment tax credit under section 48 would allow an energy property to be eligible for 100 percent of the section 48 credit if it receives at least 50 percent of its energy input from a qualifying source but would render the energy property ineligible for the section 48 credit if less than 50 percent of its energy input is from a qualifying source. Commenters asserted that a 50-percent Cliff would be more equitable than the 75-percent Cliff.

Several commenters also recommended that the regulations be modified to provide that if greater than 50 percent of energy received by an energy property is from a qualifying source that the energy property is eligible for a full section 48 credit. Conversely, if the energy property receives less than 50 percent of its energy input from a qualifying source, the qualifying basis of the energy property is reduced incrementally for the annual measuring period. Importantly, this rule would reduce the credit but not disqualify the energy property entirely from credit eligibility. The benefit of adopting this rule is that it would eliminate the ''all or nothing'' dynamic of the current 75-percent Cliff and, as a result, would provide certainty that an energy property will remain credit eligible. The main obstacle to adopting this rule is that it would be expensive for taxpayers to measure with great accuracy the relative amounts of energy input from different qualifying sources.

Many commenters suggested changing the Dual Use Rule to a ''Primary Use Rule'' modeled on the ''Primary Use'' Test for asset class depreciation determinations, changes in use, and for asset disposition purposes. According to commenters, this approach is popular because the Primary Use Test could be performed at the same time (on the placed in service date) and manner in which the taxpayer determines the primary use of the asset for depreciation purposes. The challenge of this approach is that it also depends upon taxpayers correctly using the depreciation asset class determination procedures and reporting any changes in primary use to the IRS for recapture. Moreover, the scope of the Primary Use Test seems inappropriate for the section 48 credit because the Primary Use Test merely serves to determine how the property is depreciated rather than whether the property can be depreciated. Applying this test to determine credit eligibility may increase, beyond what was intended, the credit available to a taxpayer.

After consideration of the comments, the Treasury Department and the IRS have determined it would be most consistent with statutory intent to reduce the applicable threshold of the Dual Use Rule to 50 percent resulting in the adoption of a 50-percent Cliff. Therefore, proposed § 1.48–14(b)(2)(i) would require an energy property to derive a minimum of 50 percent of energy from a qualifying source during an annual measuring period. Similar to the operation of the 75-percent Cliff in existing § 1.48–9, if the energy used from qualifying sources is between 50 percent and 100 percent, only a proportionate amount of the eligible basis of the energy property will be taken into account in computing the amount of the section 48 credit. If less than 50 percent of the energy used is from qualifying sources, then the eligible basis is zero, and the property is not eligible for the section 48 credit. The Treasury Department and the IRS recognize that the Dual Use Rule is no longer relevant to determining the eligibility of energy storage technology placed in service after December 31, 2022, because the IRA added energy storage technology as an energy property effective for property placed in service after December 31, 2022. However, the Dual Use Rule may still have other applications under section 48. The Treasury Department and the IRS request comments on the application of the Dual Use Rule to

section 48 after its amendment by the IRA.

2. Aggregation of Energy Inputs

While T.D. 8147 significantly amended existing § 1.48–9 to permit 25 percent of energy used by energy property from non-qualifying sources, it did not allow the aggregation of energy from multiple energy properties to be treated as energy from qualifying sources for purposes of the Dual Use Rule.

In response to Notice 2015–70, several commenters requested a revised rule to permit taxpayers to calculate credit basis by aggregating all inputs from qualifying sources that would otherwise individually qualify for the section 48 credit (all types of energy property and any qualified facilities for which an election is made to claim the section 48 credit as a ''qualified investment credit facility'' under section 48(a)(5)). After consideration of the comments received, proposed § 1.48–14(b)(2)(ii) would revise the Dual Use Rule to permit the aggregation of energy inputs from more than one energy property.

3. Measurement Period

Existing § 1.48–9(c)(10)(iv) and (d)(6) provides that an annual measuring period is the period during which the portion of dual use property's basis or cost allocable to use of energy from a qualified source is measured. An annual measuring period for an item of dual use property is defined as 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.

In response to Notice 2015–70, several commenters requested that the regulations provide a clarification of the annual measurement rules applicable to dual use property. Several of these commenters' concerns were tied to energy storage technology. Because the IRA now includes energy storage technology as eligible property, many of these specific concerns may have been eliminated. However, the proposed regulations would still address these concerns by adopting these annual measurement rules for application to the Dual Use Rule. Accordingly, a taxpayer may claim the section 48 credit when it places an energy property in service, and all relevant time periods, including depreciation and recapture, begin on that date. After consideration of the comments, proposed § 1.48–14(b)(2)(iii) would provide that an annual measuring period for an item of dual use property is any period of 365 consecutive days (366 days in a leap year) beginning with the day the dual use property is placed in service.

4. Dual Use Property and Microgrid Controllers

Certain equipment is necessary for a microgrid controller to perform its functions, but such equipment may also have been required to be installed even without the presence of a microgrid. An example is a communications system (for example, a local ethernet network or a commercial wireless network). A microgrid controller must be connected to a communications system to operate properly. Such a communications system could be considered part of the microgrid controller itself. However, the communications system could also be used for other purposes and may not be dedicated to the microgrid system. The Dual Use Rule would be inapplicable in this scenario because the scenario does not involve the use of energy derived from both a qualifying source and from sources other than a qualifying source (non-qualifying source). The Treasury Department and the IRS request comments on whether a rule is needed to address this situation for microgrid controllers or other potentially similar situations for which the Dual Use Rule would not apply.

C. Energy Property That Could Be Eligible for Multiple Credits

Section 48 and the existing regulations thereunder are silent regarding the eligibility of components of energy property for multiple credits. However, in Notice 2013–70, the Treasury Department and the IRS considered the ability of a single taxpayer to claim section 25D and section 48 credits for different uses of the same energy property. In Q&A #27 of Notice 2013–70, a taxpayer purchased and installed solar electric property to generate electricity for the taxpayer's residence. The taxpayer also expected the solar electric property to generate excess electricity that would be sold to a utility. Q&A #27 determined that the taxpayer may not claim the section 25D credit for the full amount of the solar electric property expenditure because the property not only generates electricity for use in the taxpayer's residence, but it also generates electricity for sale by the taxpayer. As a result, the taxpayer may only claim the 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. However, the taxpayer may be able to claim the section 48 credit for a portion of the solar electric property expenditure if the requirements of section 48 are satisfied. Notice 2013–70 did not separately analyze whether the taxpayer had met the requirements to claim the section 48 credit.

Several commenters requested a modification of the regulations to allow section 48 credit eligibility in scenarios involving different taxpayers that claim different credits related to different components of an energy property. This may also occur in situations in which different taxpayers own components of energy property as discussed in part III.E.1 of this Summary of Comments and Explanation of Provisions. After consideration of these comments, proposed § 1.48–14(c)(1) would provide that the same energy property may be eligible for both the section 48 credit and another credit subject to certain limitations that proposed § 1.48–14(c)(2) would provide.

D. Incremental Cost

Existing guidance under section 48 provides that only the incremental cost of energy property is included in the eligible basis for purposes of determining the section 48 credit. Existing § 1.48–9(k) defines incremental cost as the excess of the total cost of equipment over the amount that would have been expended for the equipment if the equipment were not used for a qualifying purpose related to the section 48 credit. The existing regulations provide as an example, a scenario in which energy property costing $100 performs a pollution control function as well as a non-qualifying function. The example states that it would cost $60 solely to perform the non-qualifying function, thus the incremental cost to the energy property would be $40.

The Treasury Department and the IRS received no comments regarding the incremental cost rule in response to Notice 2015–70. Thus, proposed § 1.48–14(d)(1) would continue to apply this incremental cost approach and would provide that only the incremental cost of energy property is included in the eligible basis of the energy property for purposes of computing the section 48 credit.

E. Special Rules Concerning Ownership

1. Separate Ownership of Energy Property

Section 48 and the existing regulations thereunder are silent regarding whether the components of an energy property can be owned by multiple taxpayers. In Revenue Ruling 78–268, 1978–2 C.B. 10, the Treasury Department and the IRS addressed a situation involving four owners that shared a common tenancy in an electric

generating facility: two investor-owned utilities, a tax-exempt cooperative, and a tax-exempt municipality-owned utility. The specific issue raised in this Revenue Ruling was whether ownership by the tax-exempt entities disqualified the entire electric generating facility from the investment tax credit. Former section 48(a)(4) effectively stated that property owned by a tax-exempt entity could not be investment tax credit property. Revenue Ruling 78–268 concluded that the two investor-owned utilities were eligible for the investment tax credit despite the fact that the electric generating facility was not credit-eligible property in the hands of the tax-exempt entities. This revenue ruling has been interpreted to stand for the proposition that fractional interests in common tenancies should be treated as separate assets for Federal income tax purposes.

Several commenters requested the adoption of a rule that separate parties that own an interest in energy property are eligible for the section 48 credit to the extent of their fractional ownership interests. Further, these commenters also requested the adoption of a rule that, if components of energy property are owned by separate taxpayers, each taxpayer would be eligible for the section 48 credit to the extent of their cost basis in the components of energy property that they own. These commenters cite Revenue Ruling 78–268 as support for the proposition that fractional interests in common tenancies should be treated as separate assets for Federal income tax purposes.

Many commenters requested that the regulations address situations involving energy property with multiple owners, such as solar condos and community solar facilities. These commenters requested that the regulations be clarified to state that shared ownership does not affect the credit eligibility of an energy property, regardless of the ownership structure. To support this position, several commenters cite to section 25C(e)(1) (redesignated as section 25C(f)(1) of the Code by the IRA) and section 25D(e)(5) that treat a tenant-stockholder (as defined in section 216 of the Code) in a cooperative housing corporation (as defined in section 216) as making his or her proportionate share (as defined in section 216(b)(3)) of any expenditures of such corporation. Similarly, sections 25C(f)(1) and 25D(e)(6) treat an individual member of a condominium management association as having made the individual's proportionate share of any expenditures of such association. As a result, a tenant-stockholder in a cooperative or a member of a condominium association may claim a section 25C or 25D credit for their proportional share of the expenditure of the cooperative or condominium association for credit eligible property.

Several commenters expressed concerns about credit eligibility and the ownership of offshore wind property. For example, a group of commenters requested confirmation that certain transfer and power conditioning equipment necessary to deploy offshore wind is eligible for a section 48 credit, but also that the transfer and power conditioning equipment is eligible for section 48 even if owned by a separate entity from the entity that owns the offshore wind turbines or if the transfer and power conditioning equipment is shared between multiple offshore wind facilities as part of a shared transmission solution.

The Treasury Department and the IRS have determined that a taxpayer that owns an energy property is eligible for the section 48 credit only to the extent of the taxpayer's eligible basis in the energy property. In the case of multiple parties that hold ownership shares in an energy property, each party is eligible for the section 48 credit to the extent of the party's fractional ownership interest. Proposed § 1.48–14(e)(2) would adopt this position. Proposed § 1.48–14(e)(4) also would provide examples illustrating the treatment of multiple owners of an energy property.

As described in part I.D.3 of this Summary of Comments and Explanation of Provisions with regard to qualified offshore wind property, functionally interdependent components do not include power conditioning and transfer equipment such as subsea cables and voltage transformers necessary to condition electricity for use on the electrical grid. However, the power conditioning and transfer equipment are integral parts of the qualified offshore wind property, and thus, are energy property. In contrast, transmission and distribution equipment are not functionally interdependent components of an energy property nor are they an integral part of an energy property. If the taxpayer owns both the unit of energy property and at least a portion of the related power conditioning and transfer equipment, that taxpayer would be able to calculate the section 48 credit on the eligible basis of the energy property, including the taxpayer's basis in the integral power conditioning and transfer equipment. In the case of multiple parties that hold ownership shares in an energy property, each party is eligible for the section 48 credit to the extent of its fractional ownership interest. If power conditioning and transfer equipment owned by one taxpayer is an integral part of an energy property owned by an unrelated taxpayer, the taxpayer that owns the power conditioning and transfer equipment would not be eligible for the section 48 credit but the taxpayer that owns the energy property would be eligible for the section 48 credit.

For example, if Taxpayer A owns only power conditioning and transfer equipment that is an integral part of an energy property owned by unrelated Taxpayer B, Taxpayer A would not be eligible for the section 48 credit. However, this would not prevent Taxpayer B from claiming a section 48 credit on the basis of the energy property that it owns. In addition, if unrelated taxpayers Taxpayer A and Taxpayer B jointly own power conditioning and transfer equipment that is an integral part of a qualified offshore wind facility, but only Taxpayer B owns the unit of energy property (that is, the qualified offshore wind facility), only Taxpayer B may claim the section 48 credit. The amount of Taxpayer B's section 48 credit is calculated by taking into account both Taxpayer B's share of the basis in the power conditioning and transfer equipment and Taxpayer B's basis in the unit of energy property (that is, Taxpayer B's basis in qualified offshore wind facility).

2. Related Taxpayers

Section 48 does not define the term ''related taxpayers.'' This term was defined in existing § 1.48–9(q)(10)(i) in the context of qualified intercity buses. This provision states that related taxpayers are treated as one taxpayer in determining the increase in operating capacity of qualifying intercity buses and in determining the qualified investment in qualified intercity buses for the energy credit. Existing § 1.48–9(q)(10)(i) also provides that related taxpayers are members of a group of trades or businesses that are under common control (as defined in § 1.52–1(b)). The Treasury Department and the IRS received no comments regarding the related taxpayer rule in response to Notice 2015–70. As a result, proposed § 1.48–14(e)(3) would incorporate the rule provided in the existing regulations.

F. Coordination With Other Code Provisions

1. Election To Treat Qualified Facilities as Energy Property

Section 48(a)(5) allows a taxpayer that owns a qualified facility (as defined in

section 45(d)) to elect to claim the section 48 credit in lieu of the section 45 credit. Section 48(a)(5)(A) provides that if the taxpayer makes an election, the qualified facility will be treated as part of a qualified investment credit facility, and therefore deemed energy property eligible for a section 48 credit. A qualified investment credit facility is defined in section 48(a)(5)(C) as a qualified facility described in section 45(d)(1)–(4), (6), (7), (9), or (11), with respect to which no credit has been allowed under section 45, and for which the taxpayer makes an irrevocable election to claim the section 48 credit in lieu of any section 45 credit. Qualified facilities for which a taxpayer is eligible to make an election under section 48(a)(5) include wind, closed- and open-loop biomass, geothermal, solar, landfill gas, trash, hydropower, marine and hydrokinetic facilities.

Only with respect to a qualified investment credit facility, section 48(a)(5)(D) defines ''qualified property'' as tangible personal property or other tangible property (not including a building or its structural components), but only if such property is used as an integral part of the qualified investment credit facility; with respect to which depreciation (or amortization in lieu of depreciation) is allowable; that is constructed, reconstructed, erected, or acquired by the taxpayer; and the original use of the property commences with the taxpayer.

Notice 2009–52, 2009–25 I.R.B. 1094, provides taxpayers with procedures to make an election under section 48(a)(5). Proposed § 1.48–14(f)(6) would adopt the procedures in Notice 2009–52 and, as a result, Notice 2009–52 will be obsoleted upon the publication of the final regulations in the **Federal Register**.

a. Interaction of Section 45 Credit Requirements With Section 48 Credit

In response to Notice 2015–70, several commenters requested that the regulations address whether and to what extent the definition of ''qualified investment credit facility'' provided in section 48(a)(5)(C) makes the rules that generally apply for determining a taxpayer's section 45 credit applicable to qualified facilities for which the taxpayer makes an election. Additionally, Notice 2022–49 requested comments on whether guidance is needed to determine whether a qualified investment credit facility that elects to claim the section 48 credit in lieu of the section 45 credit is subject to all of the requirements of section 45, including the requirement that electricity generated by the qualified investment credit facility be sold to an unrelated person, and what factors the Treasury Department and the IRS should consider regarding such guidance. Several commenters responded and generally were not supportive of imposing the requirements of section 45 on a qualified investment credit facility that elects to claim the section 48 credit in lieu of the section 45 credit. One commenter pointed out, for example, that section 48 only cross-references specific provisions of section 45(d) and not all of section 45(d) nor all of section 45. This commenter noted that because section 48 is an investment tax credit rather than a production tax credit, the rationale for requiring sales of energy from a qualified investment credit facility to unrelated persons is inapplicable.

Section 45(a) sets forth the amount of the production tax credit for a taxable year. It does not determine whether a facility is a ''qualified facility'' (that definition is set forth in section 45(d)). Section 45(a) specifies the amount of the credit for a qualified facility by formula (0.3 cents (increased credit amount under section 45(a)(6) if the requirements of 45(a)(6)(B) are met) multiplied by the kWh of electricity generated and sold to an unrelated person. This statutory structure appears to make the requirement that electricity be sold to an unrelated person relevant only for determining the amount of the section 45 tax credit, not eligibility for the section 48 tax credit. Therefore, after consideration of these comments, the Treasury Department and the IRS have determined that the requirements of section 45 are not imposed on a qualified investment credit facility that elects to claim the section 48 credit in lieu of the section 45 credit. Proposed § 1.48–14(f)(1) would adopt this position.

b. Time and Manner of Making Election

Section 2 of Notice 2009–52 provides that, to make the election with respect to a qualified facility, a taxpayer must claim the energy credit on a completed Form 3468, *Investment Credit,* and file such form with the taxpayer's income tax return for the year in which the property is placed in service. The taxpayer must make a separate election for each qualified facility that is to be treated as a qualified investment credit facility. Proposed § 1.48–14(f)(6)(i) would adopt this procedure with some modifications. If any taxpayer owning an interest in a qualified investment credit facility makes an election under section 48(a)(5), that election would be binding on all taxpayers that directly or indirectly own an interest in the facility.

Additionally, proposed § 1.48–14(f)(6)(ii) would provide a similar special rule for partnerships and S corporations, which would require that the election be made at the entity level and is binding on all ultimate credit claimants (as defined in § 1.50–1(b)(3)(ii)) who must claim the credit in proportion to their respective qualified investment in the energy property. The credit is claimed on each claimant's completed Form 3468, or any successor form(s), and filed with a timely filed (including extensions) return for the taxable year in which the partnership or S corporation makes the election.

2. Coordination Between Section 42 and 48 Credits

Section 50(c)(3)(A) provides the general rule that a taxpayer's basis in an energy property is reduced by 50 percent of the amount of a section 48 credit determined with respect to the taxpayer's investment in the energy property. Section 13102(i) of the IRA amended section 50(c) to provide an exception to that rule for property placed in service after December 31, 2022. As a result, a taxpayer that has claimed a section 48 credit with respect to its basis in an energy property is not required to reduce its basis in the energy property when determining eligible basis for purposes of calculating a low-income housing credit under section 42 of the Code (section 42 credit). Accordingly, the basis of energy property may be used to determine a section 48 credit and may also be included in eligible basis when determining a section 42 credit.

G. Rules for Certain Lower-Output Energy Properties To Include Qualified Interconnection Costs in the Basis of Associated Energy Property

Section 13102(j) of the IRA added section 48(a)(8)(A) to the Code, which provides that, for purposes of determining the section 48 credit with respect to energy property (as defined in section 48(a)(3)) that has a maximum net output of not greater than 5 MW (as measured in alternating current) (Five-Megawatt Limitation), a taxpayer may include amounts paid or incurred by the taxpayer for qualified interconnection property in connection with the installation of the energy property to provide for the transmission or distribution of the electricity produced or stored by such energy property. Additionally, these costs must be properly chargeable to the capital account of the taxpayer.

Section 48(a)(8)(B) defines ''qualified interconnection property'' to mean, with respect to an energy project that is not

a microgrid controller, any tangible property that is part of an addition, modification, or upgrade to a transmission or distribution system that is required at or beyond the point at which the energy project interconnects to such transmission or distribution system in order to accommodate such interconnection; either that is constructed, reconstructed, or erected by the taxpayer, or for which the cost with respect to the construction, reconstruction, or erection of such property is paid or incurred by such taxpayer; and the original use of which, pursuant to an interconnection agreement, commences with a utility.

Section 48(a)(8)(C) defines an ''interconnection agreement'' as an agreement with a utility for the purposes of interconnecting the energy property owned by such taxpayer to the transmission or distribution system of such utility.

Section 48(a)(8)(D) defines the term ''utility'' for purposes of section 48(a)(8) as the owner or operator of an electrical transmission or distribution system that is subject to the regulatory authority of a State or political subdivision thereof, any agency or instrumentality of the United States, a public service or public utility commission or other similar body of any State or political subdivision thereof, or the governing or ratemaking body of an electric cooperative.

Section 48(a)(8)(E) provides a special rule for interconnection property. In the case of expenses paid or incurred for interconnection property, amounts otherwise chargeable to capital account with respect to such expenses must be reduced under rules similar to the rules of section 50(c).

1. Qualified Interconnection Property

Notice 2022–49 requested comments on several aspects of the treatment of qualified interconnection property, specifically the types of eligible costs, the required documentation, and the Five-Megawatt Limitation.

Qualified interconnection property costs arise from installation of tangible property that is part of an addition, modification, or upgrade to a transmission or distribution system at or beyond the point of interconnection. Energy property includes all functionally interdependent property owned by the taxpayer. Additionally, property owned by the taxpayer that is an integral part of such energy property is energy property. This may include power conditioning equipment owned by the taxpayer and used to condition electricity into a form suitable for use or transmission. However, qualified interconnection property, which is most similar in function to transmission and distribution property, is neither property that is a functionally interdependent component of an energy property nor an integral part of an energy property. Therefore, qualified interconnection property is not energy property. Accordingly, proposed § 1.48–14(g)(2) would clarify that qualified interconnection property is not taken into account in determining whether an energy property satisfies the requirements for the domestic content bonus credit amount referenced in section 48(a)(12)(B) and the increase in credit rate for energy communities provided in section 48(a)(14).

Consistent with section 48(a)(8)(A), however, proposed § 1.48–14(g) would clarify that, in connection with the installation by a taxpayer of energy property (as defined in section 48(a)(3)) that has a maximum net output of not greater than 5 MW (as measured in alternating current), amounts paid or incurred by the taxpayer for qualified interconnection property that is required to accommodate the interconnection are included in the basis of a related energy property. Additionally, proposed § 1.48–14(g)(3) would provide that the maximum net output of an energy property is measured only by nameplate generating capacity of the unit of energy property (or, in the case of energy storage technology, the nameplate capacity of such energy storage technology) at the time the energy property is placed in service.

2. Costs Included in Basis of Related Energy Property

Proposed § 1.48–14(g)(1) would provide that only amounts paid or incurred by a taxpayer for property that is constructed, reconstructed, or erected by the taxpayer, or for which the cost with respect to the construction, reconstruction, or erection of such property is paid or incurred by such taxpayer, will be included in the basis of a related energy property. A taxpayer that is reimbursed for these costs may not include such reimbursed costs in the amount paid or incurred by the taxpayer for qualified interconnection property. Proposed § 1.48–14(g)(6) would adopt this rule. In the case of a utility reimbursing a taxpayer for costs the taxpayer pays or incurs for qualified interconnection property, the utility should provide the taxpayer with information regarding such costs by the date on which the project is placed in service.

The Treasury Department and the IRS are aware of common situations where a taxpayer could ultimately receive a payment, credit, or service from another entity, including a utility, related to the costs the taxpayer pays or incurs for qualified interconnection property. For example, one taxpayer may place in service energy property and make payments to a utility with respect to qualified interconnection property involving the addition, modification, or upgrade to the utility's transmission system related to such energy property. Subsequently, a different taxpayer may, at a later date, place in service energy property and make payments to the same utility related to the same additions, modifications, or upgrades to the utility's transmission system that were made in response to the first taxpayer's interconnection. The utility may pay, credit, or provide services to the first taxpayer in an amount related to the costs paid by the second taxpayer. The likely amount or timing of any such payment, credit, or service would not be known at the time the first taxpayer interconnects to the utility's transmission system.

The Treasury and the IRS request comment on whether such payment, credit, or service received by the first taxpayer, as the result of subsequent payments made to a utility by other parties, should be treated as a reimbursement to the first taxpayer and impact the amount of the costs of qualified interconnection property that the first taxpayer may include in its basis for purposes of the section 48 credit. The Treasury and the IRS also request comment on whether the costs paid by the second taxpayer should be treated as amounts paid or incurred for qualified interconnection property in connection with the installation of the second taxpayer's energy property. The Treasury and IRS request comment on industry practices relevant to the determination of costs paid or incurred for qualified interconnection property, including the accounting treatment of costs paid or incurred for qualified interconnection property. The Treasury and the IRS also request comment on whether any clarifications are needed regarding the tax treatment of amounts paid or incurred for qualified interconnection property, including reimbursement of costs paid or incurred by a taxpayer for qualified interconnection costs.

In section 3.02(1)(b)(ii) of Notice 2022–49, the Treasury Department and the IRS requested comments concerning 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. Taxpayers must retain

documentation in compliance with section 6001 of the Code. The proposed regulations do not provide any specific type of required documentation, and any documentation that satisfies section 6001 will suffice to substantiate that a taxpayer has paid or incurred qualified interconnection costs. Commenters to Notice 2022–49 provided feedback on the documentation that taxpayers may use to substantiate costs paid or incurred for qualified interconnection property.

Qualified interconnection property is either constructed, reconstructed, or erected by the taxpayer, or the taxpayer pays or incurs the cost with respect to the construction, reconstruction, or erection of such property; and the original use of which, pursuant to an interconnection agreement, commences with a utility. Therefore, in some cases, taxpayers will have the necessary information and documentation on these costs. In other cases, the taxpayers will need to receive this information from the utility, which, the Treasury Department and the IRS understand, will be a common scenario. For situations in which property is constructed, reconstructed, or erected by a party other than the taxpayer, final information with conclusive details such as a true-up report with the actual costs, final invoices, proof of payment or reimbursement, and permission to operate documentation or any other final project accounting documentation should be maintained. Other examples of cost documentation records include, but are not limited to, the interconnection agreement, interconnection study, signed customer contracts, and cost certification reports.

3. Five-Megawatt Limitation

Under section 48(a)(8)(A), energy property includes amounts paid or incurred by the taxpayer for qualified interconnection property in connection with the installation of energy property only if it has a maximum net output of not greater than 5 MW (as measured in alternating current). The addition of amounts paid or incurred by the taxpayer for qualified interconnection property in section 48(a)(8)(A) is tied to the installation of ''energy property.'' The statute clearly ties the 5 MW limitation to the energy property; therefore, as long as an energy property is 5 MW or less, the statute is satisfied. Additionally, measurement at the level of the energy property provides certainty for taxpayers and the IRS because it is measured by the energy property's maximum net output when it is placed in service. Therefore, proposed § 1.48–14(g)(3) would provide that the Five-Megawatt Limitation must be measured at the level of the energy property. Proposed § 1.48–14(g)(7) also would provide examples illustrating the application of this rule.

In accordance with proposed § 1.48–14(g)(3), if an energy project comprised of multiple energy properties has a combined nameplate capacity in excess of 5 MW, each of the energy properties would nonetheless be eligible to include amounts paid or incurred by the taxpayer for qualified interconnection property if each energy property satisfies the Five-Megawatt Limitation. The Treasury Department and the IRS request comments regarding the application of the Five-Megawatt Limitation to a single energy property, including whether the definition of an energy property is sufficiently clear for this purpose. In addition, the Treasury Department and the IRS request comments regarding the circumstances under which multiple energy properties each with a nameplate capacity of less than 5 MW would utilize common power conditioning equipment for economic or regulatory reasons and/or common interconnection agreements, or would instead utilize separate power conditioning equipment and/or interconnection agreements.

4. Non-Application to Certain Types of Energy Properties

The definition of qualified interconnection property specifically excludes interconnection property installed with respect to an energy project that is a microgrid controller. Additionally, taxpayers may not include the costs of qualified interconnection property in the basis of electrochromic glass property and fiber optic solar energy property because these types of energy property do not require additions, modifications, or upgrades to a transmission or distribution system. Similarly, in the case of energy properties that generate thermal energy, such as certain geothermal property and qualified biogas property, this provision is inapplicable.

Effect on Other Documents

Notice 2009–52 will be obsoleted upon publication of the final regulations in the **Federal Register**. Notice 2009–52, in relevant part, provides procedures for taxpayers to make an irrevocable election under section 48(a)(5) to treat qualified property that is part of a qualified investment credit facility as energy property eligible for a section 48 credit in lieu of a section 45 credit.

Proposed Applicability Dates

Except for the provisions of proposed §§ 1.48–13 and 1.6418–5(f), these regulations generally are proposed to apply with respect to property that is placed in service after December 31, 2022, and during a taxable year beginning after the date final regulations are published in the **Federal Register**. Proposed § 1.6418–5(f) is proposed to apply to taxable years ending on or after the date final regulations are published in the **Federal Register**. A taxpayer may rely on proposed §§ 1.48–9, 1.48–14, and 1.6418–5(f) with respect to property that is placed in service after December 31, 2022, and during a taxable year beginning on or before the date final regulations are published in the **Federal Register**, provided the taxpayer and all related persons (within the meaning of sections 267(b) and 707(b) of the Code) apply proposed §§ 1.48–9 and 1.48–14 in their entirety and in a consistent manner.

Proposed § 1.48–13 is proposed to apply to projects placed in service in taxable years ending after the date final regulations are published in the **Federal Register**, and the construction of which begins after the date final regulations are published in the **Federal Register**. However, proposed § 1.48–13(d) is proposed to apply to energy projects the construction of which begins after November 22, 2023. Taxpayers may rely on § 1.48–13 with respect to construction of a property or project beginning on or after January 29, 2023, and on or before the date these regulations are published as final regulations in the **Federal Register**, provided, that beginning after the date that is 60 days after August 29, 2023, taxpayers follow proposed § 1.48–13 in its entirety and in a consistent manner.

Special Analyses

I. Regulatory Planning and Review—Economic Analysis

Pursuant to the Memorandum of Agreement, Review of Treasury Regulations under Executive Order 12866 (June 9, 2023), tax regulatory actions issued by the IRS are not subject to the requirements of section 6 of Executive Order 12866, as amended. Therefore, a regulatory impact assessment is not required.

II. Paperwork Reduction Act

The Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520) (PRA) requires that a Federal agency obtain the approval of Office of Management and Budget (OMB) before collecting information from the public, whether such collection of information is

mandatory, voluntary, or required to obtain or retain a benefit. A Federal agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless the collection of information displays a valid control number.

The collections of information in these proposed regulations contain reporting and recordkeeping requirements that are required to verify the eligibility of the property for the credit. These collections of information would generally be used by the IRS for tax compliance purposes and by taxpayers to facilitate proper reporting and compliance.

The reporting requirement mentioned within this proposed regulations with respect to section 48 are in proposed § 1.48–14(f)(6), which provides the time and manner for a taxpayer to make a section 48(a)(5)(C) an election to have qualified investment credit facility property that was placed in service after December 31, 2008, treated as a qualified investment credit facility for purposes of claiming the section 48 credit. These requirements are considered general tax records under § 1.6001–1.

A taxpayer must make a section 48(a)(5)(C) election on a completed Form 3468 (Investment Credit) (or successor forms, or pursuant to instructions and other guidance) with the taxpayer's timely filed return (including extensions) for the taxable year in which the energy property is placed in service. The taxpayer must make a separate section 48(a)(5)(C) election for each qualified facility that is to be treated as a qualified investment credit facility. These collections are included in Notice 2009–52, 2009–1 C.B. 1094, which is already approved under OMB Control Number 1545–2145 for all filers. Also, the election selection is included on, Form 3468, which is already approved in OMB Control Numbers 1545–0155 for trust and estate filers, 1545–0074 for individual filers, and 1545–0123 for business filers. This proposed regulation is not changing the collection requirements already approved by OMB.

These proposed regulations would also include reporting requirements, in addition to the general reporting requirements set forth in in § 1.45–12 of the August Proposed Regulations, for taxpayers that claim an increased credit amount under section 48(a)(9)(B)(iii). These proposed regulations would require taxpayers to verify compliance with the Prevailing Wage Requirements by providing information that includes the aggregate information detailed in § 1.45–12 of the August Proposed Regulations during the five-year recapture period after an energy project is placed in service. The Secretary may issue forms and instructions in future guidance for the purpose of meeting these reporting requirements. As set forth in the preamble to the August Proposed Regulations, these reporting requirements will be covered under OMB control numbers 1545–0074 for individuals/sole proprietors and 1545–0123 for business entities. The IRS has solicited public comments on these requirements and the associated burdens for trusts and estates and has sought OMB approval under a new OMB control number (1545–NEW) for trust and estate filers. This proposed regulation is not changing or creating new collection requirements not already approved by, or will be approved by, OMB for the § 1.45–12.

These proposed regulations also describe recapture procedures as detailed in proposed § 1.6418–5. The reporting of a section 48(a)(10)(C) recapture event will still be required to be reported using Form 4255, *Recapture of Investment Credit.* This form is approved under OMB control numbers 1545–0074 for individuals, 1545–0123 for business entities, and 1545–0166 for trust and estate filers. The proposed regulation is not changing or creating new collection requirements not already approved by OMB.

III. Regulatory Flexibility Act

The Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*) (RFA) imposes certain requirements with respect to Federal rules that are subject to the notice and comment requirements of section 553(b) of the Administrative Procedure Act (5 U.S.C. 551 *et seq.*) and that are likely to have a significant economic impact on a substantial number of small entities. Unless an agency determines that a proposal is not likely to have a significant economic impact on a substantial number of small entities, section 603 of the RFA requires the agency to present an initial regulatory flexibility analysis (IRFA) of the proposed rule.

The Treasury Department and the IRS have not determined whether the proposed rule, when finalized, will likely have a significant economic impact on a substantial number of small entities. This determination requires further study. However, because there is a possibility of significant economic impact on a substantial number of small entities, an IRFA is provided in these proposed regulations. The Treasury Department and the IRS invite comments on both the number of entities affected and the economic impact on small entities.

Pursuant to section 7805(f), this notice of proposed rulemaking has been submitted to the Chief Counsel of Advocacy of the Small Business Administration for comment on its impact on small business.

A. Need for and Objectives of the Rule

The proposed regulations will provide greater clarity to taxpayers for purposes of claiming the section 48 credit for energy property. The proposed rule is expected to encourage taxpayers to invest in developing new energy properties, including qualified facilities otherwise eligible for the section 45 credit for which a taxpayer makes a section 48(a)(5)(C) election. Thus, the Treasury Department and the IRS intend and expect that the proposed rule will deliver benefits across the economy that will beneficially impact various industries.

B. Affected Small Entities

The Small Business Administration estimated in its 2018 Small Business Profile that 99.9 percent of United States businesses meet its definition of a small business. The applicability of these proposed regulations does not depend on the size of the business, as defined by the Small Business Administration. As described more fully in the preamble to these proposed regulations and in this IRFA, these rules may affect a variety of different businesses across several different industries.

The section 48 credit incentivizes the development of energy property. Because the potential credit claimants can vary widely, it is difficult to estimate at this time the impact of these proposed regulations, if any, on small businesses.

The Treasury Department and the IRS expect to receive more information on the impact on small businesses through comments on this proposed rule and again when taxpayers start to claim the section 48 credit using the guidance and procedures provided in these proposed regulations.

C. Impact of the Rule

The proposed regulations will allow taxpayers to plan investments and transactions based on the ability to claim the section 48 credit. The increased use of the section 48 credit will incentivize the development of technologies for energy generation and storage. The use of the section 48 credit may also lead to additional investment in electrical grid infrastructure to transport electricity.

Because the statutory changes that are reflected in the proposed rules have already been accounted for by Form 3468, the recordkeeping and reporting requirements should not increase for taxpayers that already claim the section 48 credit. The Form 3468 already provides the procedures for taxpayers to make a section 48(a)(5)(C) election. To make the election, a taxpayer must claim the energy credit with respect to a qualified investment credit facility property on a completed Form 3468 (Investment Credit) (or successor forms, or pursuant to instructions and other guidance) and file such form with the taxpayer's timely filed return (including extensions) for the taxable year in which the property is placed in service. Although the Treasury Department and the IRS do not have sufficient data to precisely determine the likely extent of the increased costs of compliance, the estimated burden of complying with the recordkeeping and reporting requirements are described in the Paperwork Reduction Act section of the preamble.

D. Duplicative, Overlapping, or Conflicting Federal Rules

The proposed rule would not duplicate, overlap, or conflict with any relevant Federal rules. As discussed above, the proposed rule would merely provide procedures and definitions to allow taxpayers to claim the section 48 credit.

IV. Unfunded Mandates Reform Act

Section 202 of the Unfunded Mandate Reform Act of 1995 (UMRA) requires that agencies assess anticipated costs and benefits and take certain other actions before issuing a final rule that includes any Federal mandate that may result in expenditures in any one year by a State, local, or Tribal government, in the aggregate, or by the private sector, of $100 million (updated annually for inflation). These proposed regulations do not include any Federal mandate that may result in expenditures by State, local, or Tribal governments or by the private sector in excess of that threshold.

V. Executive Order 13132: Federalism

Executive Order 13132 (Federalism) prohibits an agency from publishing any rule that has federalism implications if the rule either imposes substantial, direct compliance costs on State and local governments, and is not required by statute, or preempts State law, unless the agency meets the consultation and funding requirements of section 6 of the Executive order. These proposed regulations do not have federalism implications and do not impose substantial, direct compliance costs on State and local governments or preempt State law within the meaning of the Executive order.

VI. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

Executive Order 13175 (Consultation and Coordination With Indian Tribal Governments) prohibits an agency from publishing any rule that has Tribal implications if the rule either imposes substantial, direct compliance costs on Indian Tribal governments, and is not required by statute, or preempts Tribal law, unless the agency meets the consultation and funding requirements of section 5 of the Executive order. This proposed rule does not have substantial direct effects on one or more Federally recognized Indian Tribes and does not impose substantial direct compliance costs on Indian Tribal governments within the meaning of the Executive order.

Statement of Availability of IRS Documents

IRS notices and other guidance cited in this preamble are published in the Internal Revenue Bulletin (or Cumulative Bulletin) and are available from the Superintendent of Documents, U.S. Government Publishing Office, Washington, DC 20402, or by visiting the IRS website at *https://www.irs.gov.*

Comments and Public Hearing

Before these proposed amendments to the regulations are adopted as final regulations, consideration will be given to any comments regarding the notice of proposed rulemaking and partial withdrawal of notice of proposed rulemaking that are submitted timely to the IRS in the preamble under the **ADDRESSES** section. The Treasury Department and the IRS request comments on all aspects of the proposed regulations. All comments submitted will be made available at *http://www.regulations.gov* or upon request for public inspection and copying.

A public hearing has been scheduled for February 20, 2024, at 10 a.m. ET, in the Auditorium at the Internal Revenue Building, 1111 Constitution Ave. NW, Washington, DC. Because of access restrictions, visitors will not be admitted beyond the immediate entrance area more than 30 minutes before the hearing starts. Participants may alternatively attend the public hearing by telephone.

The rules of 26 CFR 601.601(a)(3) apply to the public hearing. Persons who wish to present oral comments at the public hearing must submit an outline of the topics to be discussed and the time to be devoted to each topic by January 22, 2024. A period of 10 minutes will be allotted to each person for making comments. An agenda showing the scheduling of the speakers will be prepared after the deadline for receiving outlines has passed. Copies of the agenda will be available free of charge at the public hearing. If no outline of the topics to be discussed at the public hearing is received by January 22, 2024, the public hearing will be cancelled. If the public hearing is cancelled, a notice of cancellation of the public hearing will be published in the **Federal Register**.

Individuals who want to testify in person at the public hearing must send an email to *publichearings@irs.gov* to have your name added to the building access list. The subject line of the email must contain the regulation number REG–132569–17 and the language TESTIFY In Person. For example, the subject line may say: Request to TESTIFY In Person at Hearing for regulation number REG–132569–17.

Individuals who want to testify by telephone at the public hearing must send an email to *publichearings@irs.gov* to receive the telephone number and access code for the hearing. The subject line of the email must contain the regulation number REG–132569–17 and the language TESTIFY Telephonically. For example, the subject line may say: Request to TESTIFY Telephonically at Hearing for REG–132569–17.

Individuals who want to attend the public hearing in person without testifying must also send an email to *publichearings@irs.gov* to have your name added to the building access list. The subject line of the email must contain the regulation number REG–132569–17 and the language ATTEND In Person. For example, the subject line may say: Request to ATTEND Hearing in Person for REG–132569–17. Requests to attend the public hearing must be received by 5:00 p.m. on February 15, 2024.

Hearings will be made accessible to people with disabilities. To request special assistance during a hearing please contact the Publications and Regulations Branch of the Office of Associate Chief Counsel (Procedure and Administration) by sending an email to *publichearings@irs.gov* (preferred) or by telephone at (202) 317–6901 (not a toll-free number) by at least 5:00 p.m. on February 14, 2024.

Drafting Information

The principal authors of these proposed rules are Martha M. Garcia

and Boris Kukso of the Office of Associate Chief Counsel (Passthroughs & Special Industries). However, other personnel from the Treasury Department and the IRS participated in their development.

List of Subjects in 26 CFR Part 1

Income taxes, Reporting and recordkeeping requirements.

Partial Withdrawal of Notice of Proposed Rulemaking

Under the authority of 26 U.S.C. 7805, proposed § 1.48–13 contained in the notice of proposed rulemaking (REG–100908–23) that was published in the **Federal Register** on August 30, 2023 (88 FR 60018), is withdrawn.

Proposed Amendments to the Regulations

Accordingly, the Treasury Department and the IRS propose to amend 26 CFR part 1 as follows:

PART 1—INCOME TAXES

■ **Paragraph 1.** The authority citation for part 1 is amended by:
■ a. Revising the entry for § 1.48–9; and
■ b. Adding entries in numerical order for §§ 1.48–13, 1.48–14, and 1.6418–5.

The revision and additions read in part as follows:

Authority: 26 U.S.C. 7805 * * *

* * * * *

Section 1.48–9 also issued under 26 U.S.C. 48(a)(3)(D)(i) and (16). * * *

Section 1.48–13 also issued under 26 U.S.C. 48(a)(10)(C) and (16). * * *

Section 1.48–14 also issued under 26 U.S.C. 48(a)(16). * * *

* * * * *

Section 1.6418–5 also issued under 26 U.S.C. 48(a)(10)(C) and 6418(g) and (h).

* * * * *

■ **Par. 2.** Revise § 1.48–9 to read as follows:

§ 1.48–9 Definition of energy property.

(a) *In general.* For purposes of the energy credit determined under section 48 of the Internal Revenue Code (Code), the term *energy property* means property that, taking into account the definition of the term *unit of energy property* (defined in paragraph (f)(2)(i) of this section) and of other terms defined in paragraph (b) and other provisions of this section, meets the requirements of paragraph (c) of this section and is of a type of energy property set forth in paragraph (e) of this section. Paragraph (d) of this section provides rules for property excluded from energy property. Paragraph (f) of this section provides rules for components included in an energy property. Paragraph (g) of this section provides the applicability date for this section.

(b) *Definitions related to requirements for energy property.* For purposes of section 48 of the Code, this section, §§ 1.48–13 and 1.48–14, and any provision of the Code or this chapter that expressly refers to any of the foregoing, the following definitions apply:

(1) *Construction, reconstruction, or erection of energy property.* The term *construction, reconstruction, or erection of energy property* means work performed to construct, reconstruct, or erect energy property either by the taxpayer or for the taxpayer in accordance with the taxpayer's specifications.

(2) *Acquisition of energy property.* The term *acquisition of energy property* means a transaction by which a taxpayer obtains rights and obligations with respect to energy property, including—

(i) Title to the energy property under the law of the jurisdiction in which the energy property is placed in service, unless the property is possessed or controlled by the taxpayer as a lessee, and

(ii) Physical possession or control of the energy property.

(3) *Original use of energy property*—(i) *In general.* The term *original use of energy property* means the first use to which a unit of energy property is put, whether or not such use is by the taxpayer.

(ii) *Retrofitted units of energy property.* A retrofitted unit of energy property acquired by the taxpayer will not be treated as being put to original use by the taxpayer unless the rules in § 1.48–14(a) regarding retrofitted energy property (80/20 Rule) or paragraph (e)(10)(v) of this section regarding modifications of certain energy storage technology apply. The question of whether a unit of energy property meets the 80/20 Rule or is modified (as described in paragraph (e)(10)(v) of this section) is a facts and circumstances determination.

(4) *Allowable*—(i) *In general.* For purposes of applying paragraph (c)(1)(ii) of this section, depreciation (or amortization in lieu of depreciation) is *allowable* with respect to energy property if such property is of a character subject to the allowance for depreciation under section 167 of the Code and the basis or cost of such property is recovered using a method of depreciation (for example, the straight line method), which includes any additional first year depreciation deduction method of depreciation (for example, under section 168(k) of the Code). Further, if an Internal Revenue Service adjustment with respect to the Federal income tax or information return for such taxable year requires the basis or cost of such energy property to be recovered using a method of depreciation, depreciation is allowable to the taxpayer with respect to energy property.

(ii) *Exclusions from allowable.* For purposes of paragraph (b)(4)(i) of this section, depreciation is not allowable with respect to energy property if the basis or cost of such property is not recovered through a method of depreciation but, instead, such basis or cost is recovered through a deduction of the full basis or cost of the energy property in one taxable year (for example, under section 179 of the Code).

(5) *Placed in service*—(i) *In general.* Energy property is considered placed in service in the earlier of:

(A) The taxable year in which, under the taxpayer's depreciation practice, the period for depreciation with respect to such energy property begins; or

(B) The taxable year in which the energy property is placed in a condition or state of readiness and availability for a specifically assigned function, whether in a trade or business or in the production of income. Energy property in a condition or state of readiness and availability for a specifically assigned function includes, but is not limited to, components that are acquired and set aside during the taxable year for use as replacements for a particular energy property (or energy properties) in order to avoid operational time loss and equipment that is acquired for a specifically assigned function and is operational but is undergoing testing to eliminate any defects. However, components acquired to be used in the construction of an energy property will not be considered in a condition or state of readiness and availability for a specifically assigned function.

(ii) *Energy property subject to § 1.48–4 election to treat lessee as purchaser.* Notwithstanding paragraph (b)(5)(i) of this section, energy property with respect to which an election is made under § 1.48–4 to treat the lessee as having purchased such energy property is considered placed in service by the lessor in the taxable year in which possession is transferred to such lessee.

(6) *Unit of energy property.* The term *unit of energy property* is defined in paragraph (f)(2)(i) of this section. No provision of this section or § 1.48–13 or § 1.48–14 uses the term *unit* in respect of energy property with any meaning other than that provided in paragraph (f)(2)(i) of this section.

(7) *Claim.* With respect to a section 48 credit determined with respect to energy property of a taxpayer, the term *claim* means filing a completing Form 3468, *Investment Credit,* or any successor form(s), with the taxpayer's timely filed (including extensions) Federal income tax return for the taxable year in which the energy property is placed in service, and includes the making of an election under section 6417 or 6418 of the Code and corresponding regulations with respect to such section 48 credit and made on the taxpayer's Federal income tax return or annual information return.

(c) *Requirements for energy property*—(1) *In general.* Energy property must satisfy each of the requirements of paragraphs (c)(1)(i) through (v) of this section:

(i) The taxpayer constructs, reconstructs, or erects the property, or, if the original use of the property commences with the taxpayer, acquires the property;

(ii) Depreciation (or amortization in lieu of depreciation) is allowable with respect to the property;

(iii) The property meets the performance and quality standards as provided in paragraph (c)(2) of this section;

(iv) The construction of the property begins before the date provided in section 48 of the Code (if any such date is provided); and

(v) The property is placed in service by the taxpayer by the date provided in section 48 (if any such date is provided).

(2) *Performance and quality standards*—(i) *In general.* Energy property must meet performance and quality standards, if any, which have been prescribed by the Secretary of the Treasury or her delegate (after consultation with the Secretary of Energy) and are in effect at the time of acquisition of the energy property.

(ii) *Special rules for performance and quality standards*—(A) *Small wind energy property.* Small wind energy property must meet the performance and quality standards in effect at the time of acquisition of the small wind turbine set forth in the American Wind Energy Association Small Wind Turbine Performance and Safety Standard 9.1–2009, or subsequent revisions (AWEA); International Electrotechnical Commission 61400–1, 61400–2, 61400–11, 61400–12, or subsequent revisions (IEC); or the ANSI/ACP 101–1–2021, the Small Wind Turbine Standard, or subsequent revisions (ACP). The certification requirements applicable to such performance and quality standards are provided in guidance published in the Internal Revenue Bulletin. *See* § 601.601 of this chapter.

(B) *Electrochromic glass property.* To be eligible for the section 48 credit, electrochromic windows must be rated in accordance with the National Fenestration Rating Council (NFRC) and secondary glazing systems must be rated in accordance with the Attachments Energy Rating Council (AERC) Rating and Certification Process, or subsequent revisions. *See* paragraph (e)(2)(ii) of this section for the definition of electrochromic glass property.

(iii) *Time of acquisition.* For purposes of applying performance and quality standards, the time of acquisition is the date the taxpayer enters into a binding contract (as defined in paragraph (c)(2)(iv) of this section) to acquire the property, or, in the case of property constructed, reconstructed, or erected by the taxpayer, the earlier of the date that—

(A) The taxpayer begins construction, reconstruction, or erection of the property, or

(B) The taxpayer and another person enter into a binding contract (as defined in paragraph (c)(2)(iv) of this section) requiring the other person to construct, reconstruct, or erect property and to place the property in service for an agreed upon use.

(iv) *Binding contract.* For purposes of this paragraph (c)(2), a contract is binding only if it is enforceable under State law against the taxpayer or a predecessor and does not limit damages to a specified amount (for example, by use of a liquidated damages provision). For this purpose, a contractual provision that limits damages to an amount equal to at least five percent of the total contract price will not be treated as limiting damages to a specified amount. For additional guidance regarding the definition of a binding contract, see § 1.168(k)–2(b)(5)(iii)(A).

(d) *Property that is not energy property*—(1) *Interaction with section 45.* Energy property does not include any property that is part of a qualified facility the production from which is allowed as a credit determined under section 45 of the Code (section 45 credit) for the taxable year or any prior taxable year. However, see paragraph (f)(3) of this section for rules regarding property that is an integral part of an energy property that is also used by a qualified facility. *See* § 1.48–14(f)(1) for rules regarding making an election under section 48(a)(5) of the Code to treat a qualified facility as an energy property.

(2) *Other property.* Energy property also does not include power purchase agreements, goodwill, going concern value, or renewable energy certificates.

(e) *Types of energy property.* The types of energy property eligible for a section 48 credit are:

(1) *Solar energy property*—(i) *In general. Solar energy property* is equipment that uses solar energy to generate electricity, to heat or cool (or provide hot water for use in) a structure, or to provide solar process heat, excepting property used to generate energy for the purposes of heating a swimming pool. Solar energy property includes solar electric generation equipment (as defined in paragraph (e)(1)(ii) of this section), solar process heat equipment (as defined in paragraph (e)(1)(iii) of this section), and equipment that uses solar energy to heat or cool a structure or provide hot water for use in a structure, and parts related to the functioning of all such equipment.

(ii) *Solar electric generation equipment. Solar electric generation equipment* is equipment that converts sunlight into electricity through the use of devices such as solar cells or other collectors.

(iii) *Solar process heat equipment. Solar process heat equipment* is equipment that uses solar energy to generate steam at high temperatures for use in industrial or commercial processes.

(2) *Fiber-optic solar energy property and electrochromic glass property*—(i) *Fiber-optic solar energy property. Fiber-optic solar energy property* is equipment that uses solar energy to illuminate the inside of a structure using fiber-optic distributed sunlight.

(ii) *Electrochromic glass property. Electrochromic glass energy property* uses electricity to change its light transmittance properties (both visible and near infrared light) in order to heat or cool a structure. For purposes of section 48, windows, including secondary windows (also referred to as secondary glazings), that incorporate electrochromic glass are treated as electrochromic glass property.

(3) *Geothermal energy property*—(i) *In general. Geothermal energy property* is equipment used to produce, distribute, or use energy derived from a geothermal deposit (within the meaning of section 613(e)(2) of the Code), but only, in the case of electricity generated by geothermal power, up to (but not including) the electrical transmission stage. Geothermal equipment includes production equipment (as defined in paragraph (e)(3)(ii) of this section) and distribution equipment (as defined in paragraph (e)(3)(iii) of this section).

(ii) *Production equipment.* For purposes of paragraph (e)(3)(i) of this section, *production equipment* is equipment necessary to bring

geothermal energy from the subterranean deposit to the surface, including well-head and downhole equipment (such as screening or slotting liners, tubing, downhole pumps, and associated equipment). Production, injection, and monitoring wells required for production of the geothermal deposit qualify as production equipment. If geothermal energy is used to generate electricity, production equipment also includes the property necessary to produce electricity. Production equipment does not include equipment used for exploration and development of geothermal deposits.

(iii) *Distribution equipment.* For purposes of paragraph (e)(3)(i) of this section, *distribution equipment* is equipment that transports geothermal energy from a geothermal deposit to the site of ultimate use. If geothermal energy is used to generate electricity, distribution equipment includes equipment that transports geothermal fluids between the geothermal deposit and the power plant. Distribution equipment also includes components of a building's heating and/or cooling system, such as pipes and ductwork that distribute within a building the energy derived from the geothermal deposit.

(4) *Qualified fuel cell property. Qualified fuel cell property* is a fuel cell power plant that has a nameplate capacity of at least 0.5 kilowatts (kW) (1 kW in the case of a fuel cell power plant with a linear generator assembly) of electricity using an electrochemical or electromechanical process, and an electricity-only generation efficiency greater than 30 percent. For this purpose, electricity-only generation efficiency may be calculated by dividing the heat rate of the fuel cell (for example, kilowatt-hours (kWh) electricity produced per kilogram (kg) of fuel consumed) by the higher heating value of the fuel (for example, kWh per kg). A fuel cell power plant is an integrated system comprised of a fuel cell stack assembly, or linear generator assembly, and associated balance of plant components that converts a fuel into electricity using electrochemical or electromechanical means. A linear generator assembly does not include any assembly that contains rotating parts.

(5) *Qualified microturbine property. Qualified microturbine property* is a stationary microturbine power plant that has a nameplate capacity of less than 2,000 kW and an electricity-only generation efficiency of not less than 26 percent at International Standard Organization conditions. A stationary microturbine power plant is an integrated system comprised of a gas turbine engine, a combustor, a recuperator or regenerator, a generator or alternator, and associated balance of plant components that converts a fuel into electricity and thermal energy. A stationary microturbine power plant also includes all secondary components located between the existing infrastructure for fuel delivery and the existing infrastructure for power distribution, including equipment and controls for meeting relevant power standards, such as voltage, frequency, and power factors.

(6) *Combined heat and power system (CHP) property*—(i) *In general. CHP property* is property comprising a system that uses the same energy source for the simultaneous or sequential generation of electrical power, mechanical shaft power, or both, in combination with the generation of steam or other forms of useful thermal energy (including heating and cooling applications). CHP property must produce at least 20 percent of its total useful energy in the form of thermal energy that is not used to produce electrical or mechanical power (or combination thereof), and at least 20 percent of its total useful energy in the form of electrical or mechanical power (or combination thereof). The energy efficiency percentage of CHP property must exceed 60 percent (except in the case of CHP systems that use biomass within the meaning of section 45 of the Code). CHP property does not include any property comprising a system if such system has a capacity in excess of 50 MW or a mechanical energy capacity in excess of 67,000 horsepower or an equivalent combination of electrical and mechanical energy capacities.

(ii) *Components excluded.* CHP property does not include property used to transport the energy source to the generating facility or to distribute energy produced by the facility.

(7) *Qualified small wind energy property.* Qualified small wind energy property is property that uses a qualifying small wind turbine to generate electricity. A qualifying small wind turbine means a wind turbine that has a nameplate capacity of not more than 100 kW.

(8) *Geothermal heat pump equipment.* Geothermal heat pump equipment is equipment that uses the ground, ground water, or other underground fluids as a thermal energy source to heat a structure or as a thermal energy sink to cool a structure.

(9) *Waste energy recovery property (WERP)*—(i) *In general.* WERP is property that generates electricity solely from heat from buildings or equipment if the primary purpose of such building or equipment is not the generation of electricity. Examples of buildings or equipment the primary purpose of which is not the generation of electricity include, but are not limited to, manufacturing plants, medical care facilities, facilities on college campuses, pipeline compressor stations, and associated equipment. WERP does not include any property that has a capacity in excess of 50 MW.

(ii) *Coordination with CHP property.* Any WERP that is part of a system that is a CHP property is not treated as WERP for purposes of section 48 of the Code unless the taxpayer elects to not treat such system as a CHP property for purposes of section 48.

(10) *Energy storage technology*—(i) *In general.* Energy storage technology includes electrical energy storage property described in paragraph (e)(10)(ii) of this section, thermal energy storage property described in paragraph (e)(10)(iii) of this section, and hydrogen energy storage property described in paragraph (e)(10)(iv) of this section.

(ii) *Electrical energy storage property.* Electrical energy storage property is property (other than property primarily used in the transportation of goods or individuals and not for the production of electricity) that receives, stores, and delivers energy for conversion to electricity, and has a nameplate capacity of not less than 5 kWh. For example, subject to the exclusion for property primarily used in the transportation of goods or individuals, electrical energy storage property includes but is not limited to rechargeable electrochemical batteries of all types (such as lithium ion, vanadium flow, sodium sulfur, and lead-acid); ultracapacitors; physical storage such as pumped storage hydropower, compressed air storage, flywheels; and reversible fuel cells.

(iii) *Thermal energy storage property.* Thermal energy storage property is property comprising a system that is directly connected to a heating, ventilation, or air conditioning (HVAC) system; removes heat from, or adds heat to, a storage medium for subsequent use; and provides energy for the heating or cooling of the interior of a residential or commercial building. Thermal energy storage property includes equipment and materials, and parts related to the functioning of such equipment, to store thermal energy for later use to heat or cool, or to provide hot water for use in heating a residential or commercial building. It does not include a swimming pool, CHP property, or a building or its structural components. For example, thermal energy storage includes, but is not limited to, thermal ice storage systems that use electricity to run a refrigeration cycle to produce ice

that is later connected to the HVAC system as an exchange medium for air conditioning the building, heat pump systems that store thermal energy in an underground tank or borehole field to be extracted for later use for heating and/or cooling, and electric furnaces that use electricity to heat bricks to high temperatures and later use this stored energy to heat a building through the HVAC system.

(iv) *Hydrogen energy storage property.* Hydrogen energy storage property is property (other than property primarily used in the transportation of goods or individuals and not for the production of electricity) that stores hydrogen and has a nameplate capacity of not less than 5 kWh, equivalent to 0.127 kg of hydrogen or 52.7 standard cubic feet (scf) of hydrogen. Hydrogen energy storage property must store hydrogen that is solely used as energy and not for other purposes such as for the production of end products such as fertilizer. For example, hydrogen energy storage property includes, but is not limited to, a hydrogen compressor and associated storage tank and an underground storage facility and associated compressors.

(v) *Modifications of energy storage energy property.* With respect to electrical energy storage property and hydrogen energy storage property placed in service after December 31, 2022, energy storage technology that is modified as set forth in this paragraph (e)(10)(v) is treated as electrical energy storage property described in paragraph (e)(10)(ii) of this section or hydrogen energy storage property described in paragraph (e)(10)(iv) of this section, except that the basis of any existing property prior to such modification is not taken into account for purposes of this section and section 48. This paragraph (e)(10)(v) applies to any electrical energy storage property and hydrogen energy storage property that either:

(A) Was placed in service before August 16, 2022, and would be described in section 48(c)(6)(A)(i) of the Code, except that such property had a capacity of less than 5 kWh and is modified in a manner that such property (after such modification) has a nameplate capacity (after such modification) of not less than 5 kWh; or

(B) Is described in section 48(c)(6)(A)(i) of the Code and is modified in a manner that such property (after such modification) has an increase in nameplate capacity of not less than 5 kWh.

(11) *Qualified biogas property*—(i) *In general.* Qualified biogas property is property comprising a system that converts biomass (as defined in section 45K(c)(3) of the Code, as in effect on August 16, 2022) into a gas that consists of not less than 52 percent methane by volume (tested at the point described in paragraph (e)(11)(ii) of this section), or is concentrated by such system into a gas that consists of not less than 52 percent methane (tested at the point described in paragraph (e)(11)(ii) of this section), and captures such gas for sale or productive use and not for disposal via combustion. Qualified biogas property also includes any property that is part of such system that cleans or conditions such gas. For example, qualified biogas property includes, but is not limited to, a waste feedstock collection system, a landfill gas collection system, mixing or pumping equipment, and an anaerobic digester. However, gas upgrading equipment necessary to concentrate the gas into the appropriate mixture for injection into a pipeline through removal of other gases such as carbon dioxide, nitrogen, or oxygen is not included in qualified biogas property.

(ii) *Methane content requirement.* The methane content requirement described in section 48(c)(7)(A)(i) of the Code and paragraph (e)(11)(i) of this section is measured at the point at which gas exits the biogas production system, which may include an anerobic digester, landfill gas collection system, or thermal gasification equipment. This is the point at which a taxpayer generally must determine whether it will convert the biogas to fuel for sale or use it directly to generate heat or to fuel an electricity generation unit.

(12) *Microgrid controllers*—(i) *In general.* A microgrid controller is equipment that is part of a qualified microgrid and is designed and used to monitor and control the energy resources and loads on such microgrid. A qualified microgrid is an electrical system that includes equipment that is capable of generating not less than 4 kW and not greater than 20 MW of electricity; is capable of operating in connection with the electrical grid and as a single controllable entity with respect to such electrical grid, and independently (and disconnected) from such electrical grid; and is not part of a bulk-power system (as defined in section 215 of the Federal Power Act (16 U.S.C. 824o)).

(ii) *Capable of operating in connection with the electrical grid.* For purposes of this paragraph, a qualified microgrid includes an electrical system that is capable of operating in connection with the larger electrical grid, regardless of whether a connection to the larger electrical grid exists.

(13) *Other property included in section 48.* Any other property specified by section 48 as energy property is energy property for purposes of this section and §§ 1.48–13 and § 1.48–14.

(f) *Property included in energy property*—(1) *In general.* An energy property includes a unit of energy property (as defined in paragraph (f)(2)(i) of this section) that meets the requirements of paragraph (c) of this section, that is not excluded from energy property as provided in paragraph (d) of this section, and is of a type of energy property included in paragraph (e) of this section. Property owned by the taxpayer that is an integral part of an energy property (as defined in paragraph (f)(3) of this section) is treated as energy property. Energy property does not include any electrical transmission equipment, such as transmission lines and towers, or any equipment beyond the electrical transmission stage. Energy property also generally does not include equipment that is an addition or modification to an existing energy property. However, see § 1.48–14(a) for rules regarding retrofitted energy property (80/20 Rule) and paragraph (e)(10)(v) of this section for rules regarding modifications of certain types of energy storage technology.

(2) *Unit of energy property*—(i) *Definition.* The term *unit of energy property* means all functionally interdependent components of property (as defined in paragraph (f)(2)(ii) of this section) owned by the taxpayer that are operated together and that can operate apart from other energy properties within a larger energy project (as defined in § 1.48–13(d)). For rooftop solar energy property, all components of property that are installed on a single rooftop are considered a single unit of energy property. *See* § 1.48–13(d) for rules regarding when multiple energy properties will be treated as an energy project for certain purposes.

(ii) *Functionally interdependent*—(A) *In general.* Except as provided in paragraph (f)(3)(ii)(B) of this section, with respect to components of a unit of energy property, the term *functionally interdependent* means that the placing in service of each component is dependent upon the placing in service of each of the other components in order to generate or store electricity, thermal energy, or hydrogen as provided by section 48(c) of the Code and as described in paragraph (e) of this section.

(B) *Components of certain energy property.* In the case of solar process heat equipment, fiber-optic solar energy property, electrochromic glass property,

geothermal heat pump equipment, qualified biogas property, and microgrid controllers, with respect to components of such property, the term *functionally interdependent* means that the placing in service of each component is dependent upon the placing in service of each of the other components in order to perform the intended function of the energy property as provided by section 48(c) of the Code and as described in paragraph (e) of this section.

(3) *Integral part*—(i) *In general.* For purposes of the section 48 credit, property owned by a taxpayer is an integral part of an energy property owned by the same taxpayer if it is used directly in the intended function of the energy property as provided by section 48(c) of the Code and as described in paragraph (e) of this section and is essential to the completeness of the intended function. Property that is an integral part of an energy property is energy property. A taxpayer may not claim the section 48 credit for any property that is an integral part of the taxpayer's energy property that is not owned by the taxpayer. Multiple energy properties (whether owned by one or more taxpayers) may include shared property that may be considered an integral part of each energy property so long as the cost basis for the shared property is properly allocated to each energy property. The total cost basis of such shared property divided among the energy properties may not exceed 100 percent of the cost of such shared property. In addition, property that is shared by a qualified facility (as defined in section 45(d) of the Code) and an energy property that is an integral part of the energy property will not be considered property that is not energy property under paragraph (d) of this section.

(ii) *Power conditioning and transfer equipment.* Property that is an integral part of energy property includes power conditioning equipment and transfer equipment used to perform the intended function of the energy property as provided by section 48(c) and as described in paragraph (e) of this section. Power conditioning equipment includes, but is not limited to, transformers, inverters, and converters, which modify the characteristics of electricity or thermal energy into a form suitable for use or transmission or distribution. Parts related to the functioning or protection of power conditioning equipment are also treated as power conditioning equipment and include, but are not limited to, switches, circuit breakers, arrestors, and hardware and software used to monitor, operate, and protect power conditioning equipment. Transfer equipment includes equipment that permits the aggregation of energy generated by components of energy properties and equipment that alters voltage in order to permit transfer to a transmission or distribution line. Transfer equipment does not include transmission or distribution lines. Examples of transfer equipment include, but are not limited to, wires, cables, and combiner boxes that conduct electricity. Parts related to the functioning or protection of transfer equipment are also treated as transfer equipment and may include items such as current transformers used for metering, electrical interrupters (such as circuit breakers, fuses, and other switches), and hardware and software used to monitor, operate, and protect transfer equipment. Power conditioning equipment and transfer equipment that are integral to an energy property may be integral to another energy property or used by a qualified facility (as defined in section 45(d) of the Code), so long as the total cost basis of the integral property is properly allocated across the energy property and qualified facility that share such property.

(iii) *Roads.* Roads that are an integral part of an energy property are integral to the activity performed by the energy property such as onsite roads that are used for equipment to operate and maintain the energy property. Roads primarily for access to the site, or roads used primarily for employee or visitor vehicles, are not integral to the activity performed by an energy property.

(iv) *Fences.* Fencing is not an integral part of an energy property because it is not integral to the activity performed by the energy property.

(v) *Buildings.* Generally, buildings are not integral parts of an energy property because they are not integral to the activity of the energy property. However, the following structures are not treated as buildings for this purpose:

(A) A structure that is essentially an item of machinery or equipment; and

(B) A structure that houses property that is integral to the activity of an energy property if the use of the structure is so closely related to the use of the housed energy property that the structure clearly can be expected to be replaced when the energy property it initially houses is replaced.

(4) *Location of energy property.* Any property that meets the requirements of paragraphs (f)(2) and (3) of this section is part of an energy property regardless of where such property is located.

(5) *Examples.* This paragraph provides examples illustrating property included in energy property.

(i) *Example 1. Solar energy property.* X constructs a solar energy property (Property) comprised of 500 separate solar panels. The solar panels are connected by wires, cables, and combiner boxes. Generated electricity is conditioned for subsequent use through an inverter and eventually carried to a substation that houses a transformer where the electricity is stepped up to electrical grid voltage before being transmitted to the electrical grid through an intertie. All components of the Property, up to and including the transformer are either functionally interdependent components of the Property or are integral parts of the Property. Therefore, the Property is an energy property for purposes of the section 48 credit. When X places the Property in service, the cost of the components up to and including the transformer is included in the basis of the Property for purposes of computing the section 48 credit.

(ii) *Example 2. Co-located energy properties.* Assume the same facts as in Example 1, except that Y constructs a wind energy property (Wind Property) near X's solar energy property (Solar Property). X's Solar Property and Y's Wind Property each connect to a substation that houses a transformer where the electricity is stepped up to electrical grid voltage before being transmitted to the electrical grid through the intertie. X and Y each pay 50% of the cost of the transformer and related power conditioning equipment housed therein. X's Solar Property and Y's Wind Property are separate energy properties. When X and Y place their respective energy properties in service, the cost of the components up to and including 50% of the cost of the transformer and related power conditioning equipment is included in X's and Y's basis in their respective energy properties for purposes of computing the section 48 credit.

(iii) *Example 3. Qualified offshore wind facility.* Z constructs a qualified offshore wind facility (Offshore Wind Facility) comprised of 150 turbines for which Z makes a valid election under section 48(a)(5) of the Code to claim the section 48 credit in lieu of the section 45 credit. The alternating current electricity generated by the individual wind turbines will be carried by inter-array cables to an offshore substation where a transformer will step up the voltage of the electricity and a converter will convert it to direct current so it may be transported by subsea export cables to an onshore substation adjacent to the point of interconnection with the electrical grid. When the electricity reaches the onshore substation, it will

flow into another converter where it will be converted back to alternating current, and then through a transformer and associated switchgear where it will be converted to electrical grid voltage and where the Offshore Wind Facility can be electrically isolated from the grid. The electricity will then pass through an intertie that will take the electricity from the substation to the point of interconnection with the electrical grid. All components of the Offshore Wind Facility, up to and including the transformer and switchgear housed in the onshore substation, are either functionally interdependent components of an energy property or integral parts of an energy property. Therefore, the Offshore Wind Facility is an energy property, and when Z places the Offshore Wind Facility in service, the cost of the components up to and including the transformer and switchgear housed in the onshore substation are included in the basis of the Offshore Wind Facility for purposes of computing the section 48 credit.

(iv) *Example 4. Co-located energy property and qualified facility.* X constructs a wind facility (Wind Facility) that is co-located with an energy storage technology (Energy Storage). The Wind Facility and Energy Storage share power conditioning and transfer equipment. X assigns 50% of the cost of the shared power conditioning and transfer equipment to the Wind Facility and 50% of the cost to the Energy Storage. The power conditioning and transfer equipment are integral parts of the Energy Storage, and are therefore, considered energy property. Therefore, X will include 50% of the cost of the power conditioning and transfer equipment when determining the section 48 credit for the Energy Storage. Because the shared power conditioning and transfer equipment are not considered part of the Wind Facility, if the Wind Facility otherwise satisfies the requirements of the section 45 credit, X can claim the section 45 credit for the Wind Facility.

(g) *Applicability date.* This section applies with respect to property placed in service after December 31, 2022, and during a taxable year beginning after [DATE OF PUBLICATION OF FINAL RULE].

■ **Par. 3.** Section 1.48–13 is added to read as follows:

§ 1.48–13 Rules relating to the increased credit amount for prevailing wage and apprenticeship.

(a) *In general.* If a qualified energy project satisfies the requirements in paragraph (b) of this section, the amount of the energy credit determined under section 48(a) of the Internal Revenue Code (Code), after the application of sections 48(a)(1) through (8), and 48(a)(15), is equal to the credit determined under section 48(a) (section 48 credit) multiplied by five.

(b) *Requirements.* A qualified energy project satisfies the requirements of this paragraph (b) if it is one of the following—

(1) A project with a maximum net output of less than one megawatt (MW) of electrical (as measured in alternating current) or thermal energy determined based on the nameplate capacity as provided in paragraph (e) of this section (One-Megawatt Exception);

(2) A project the construction of which began prior to January 29, 2023; or

(3) A project that meets the prevailing wage requirements of section 48(a)(10)(A) of the Code, § 1.45–7(b)–(d), and paragraph (c) of this section, the apprenticeship requirements of section 45(b)(8) of the Code and § 1.45–8, and the recordkeeping and reporting requirements of § 1.45–12.

(c) *Special rule applicable to general prevailing wage requirements*—(1) *In general.* In addition to satisfying the prevailing wage requirements under § 1.45–7(b) through (d), a taxpayer must ensure that any laborers and mechanics employed (within the meaning of § 1.45–7) by the taxpayer or any contractor or subcontractor in the construction of such energy project, and for the five-year period beginning on the date such project is placed in service, the alteration or repair of such project, are paid wages at rates not less than the prevailing rates for construction, alteration, or repair of a similar character in the locality in which such project is located as most recently determined by the Secretary of Labor, in accordance with 40 U.S.C. chapter 31, subchapter IV. Subject to section 48(a)(10)(C) of the Code and this paragraph (c), for purposes of determining the increased credit amount under section 48(a)(9)(B)(iii) of the Code, the taxpayer is deemed to satisfy the prevailing wage requirements of section 48(a)(10)(A)(ii) of the Code at the time such project is placed in service.

(2) *Exception.* For purposes of satisfying the prevailing wage requirements of paragraph (b)(3) of this section, § 1.45–7(a) does not apply.

(3) *Recapture*—(i) *In general.* The increased credit amount under paragraph (b)(3) of this section is subject to recapture for any project that does not satisfy the prevailing wage requirements in § 1.45–7(b) through (d) and paragraph (c)(1) of this section for any period with respect to an alteration or repair of such project during the five-year period beginning on the date such project is originally placed in service (five-year recapture period) (but that does not cease to be investment credit property within the meaning of section 50(a) of the Code).

(ii) *Recapture event*—(A) *In general.* Any failure to satisfy the prevailing wage requirements in § 1.45–7(b) through (d) and paragraph (c)(1) of this section for any period with respect to the alteration or repair of any project during the five-year recapture period is a recapture event. Any failure to satisfy the prevailing wage requirements in § 1.45–7(b) through (d) and paragraph (c)(1) of this section for any period remain subject to the correction and penalty provisions in § 1.45–7(c), including the waiver provisions in § 1.45–7(c)(6). Subject to § 1.45–7(c)(5) and (6), if the correction and penalty payments described in § 1.45–7(c) are not made by the taxpayer on or before the date that is 180 days after the date of a final determination by the IRS (as defined in § 1.45–7(c)(4)(ii)), the cure provision in § 1.45–7(c) does not apply and the increased credit amount is subject to recapture.

(B) *Yearly determination.* A determination of whether a recapture event has occurred under paragraph (c)(3)(ii) of this section must be made for each taxable year (or portion thereof) occurring within the five-year recapture period, beginning with the taxable year ending after the date the energy project is placed in service. Thus, for each taxable year beginning or ending within the five-year recapture period, the taxpayer must determine whether the prevailing wage requirements of section 48(a)(10)(A) of the Code, § 1.45–7(b)–(d), and paragraph (c)(1) of this section are satisfied for the recapture year(s) occurring during each taxable year.

(C) *Carrybacks and carryforward adjusted.* In the case of any recapture event described in paragraph (c)(3)(ii)(A) of this section, the carrybacks and carryforwards under section 39 must be adjusted by reason of such recapture event.

(iii) *Correction and penalty payments not required if taxpayer is subject to recapture under section 48(a)(10)(C) of the Code.* If the IRS determines that a taxpayer that claimed the increased credit amount under section 48(a)(9)(B)(iii) of the Code or transferred a specified credit portion under section 6418 of the Code that includes the increased credit amount under section 48(a)(9)(B)(iii) failed to satisfy the prevailing wage requirements in § 1.45–

7(b) through (d) and paragraph (c)(1) of this section for any period with respect to the alteration or repair of any project during the five-year recapture period and the taxpayer does not make the correction and penalty payments provided in § 1.45–7(c), then no penalty is assessed under § 1.45–7, and the increased credit amount is subject to recapture. Taxpayers whose increased credit amount is subject to recapture under this section may still be entitled to the base amount of the energy credit under section 48(a) of the Code if such taxpayers meet the requirements to claim the credit.

(4) *Recapture amount*—(i) *In general.* If a recapture event has occurred as described in paragraph (c)(3)(ii) of this section and the taxpayer fails to make the correction and penalty payments described in § 1.45–7(c)(1) within 180 days after the date of a final determination by the IRS, the tax under chapter 1 of the Code for the taxable year in which the recapture event occurs is increased by the applicable recapture percentage multiplied by the increased credit amount that was claimed by the taxpayer under paragraph (b)(3) of this section.

(ii) *Applicable recapture percentage.* If the recapture event occurs:

(A) Within one full year after the property is placed in service, the recapture percentage is 100;

(B) Within one full year after the close of the period described in paragraph (c)(4)(ii)(A) of this section, the recapture percentage is 80;

(C) Within one full year after the close of the period described in paragraph (c)(4)(ii)(B) of this section, the recapture percentage is 60;

(D) Within one full year after the close of the period described in paragraph (c)(4)(ii)(C) of this section, the recapture percentage is 40;

(E) Within one full year after the close of the period described in paragraph (c)(4)(ii)(D) of this section, the recapture percentage is 20.

(5) *Recapture period.* The five-year recapture period begins on the date the project is placed in service and ends on the date that is five full years after the placed-in-service date. Each 365-day period (366-day period in case of a leap year) within the five-year recapture period is a separate recapture year for recapture purposes.

(6) *Increase in tax for recapture.* The increase in tax under chapter 1 of the Code for the recapture of an increased credit amount claimed under paragraph (b)(3) occurs in the year of the recapture event.

(7) *Annual prevailing wage compliance report.* In addition to the general reporting requirements in § 1.45–12, a taxpayer that has claimed an increased credit amount under paragraph (b)(3) of this section or transferred a specified credit portion under section 6418 of the Code that includes an increased credit amount under paragraph (b)(3) of this section is required to provide to the IRS, information on the payment of prevailing wages with respect to any alteration or repair of the project during the recapture period at the time and in the form and manner prescribed in IRS forms or instructions or in publications or guidance published in the Internal Revenue Bulletin. *See* § 601.601 of this chapter.

(8) *Transferred specified credit portions.* In the case of a transferred specified credit portion under section 6418, to which recapture of an increased credit amount under this paragraph (c) applies, the eligible taxpayer is required to notify the transferee taxpayer of the recapture event in accordance with the provisions of § 1.6418–5(f)(2) and the transferee taxpayer is responsible for any amount of increase in tax under section 48(a)(10)(C) of the Code and this paragraph (c) in accordance with the provisions of § 1.6418–5(f)(3).

(9) *Coordination with recapture rules under section 50(a).* If any increased credit amount was recaptured with respect to investment credit property in a prior year under section 48(a)(10)(C) of the Code and this paragraph (c), then, such increased credit amount is not included in determining the aggregate decrease in the credits allowed under section 38 of the Code for all prior taxable years which would have resulted solely from reducing to zero the credit determined under subparts D and E of part IV of subchapter A of chapter 1 of the Code (that is, sections 38–50 of the Code) with respect to the property.

(d) *Energy project defined*—(1) *In general.* For purposes of the increased credit amount provided by section 48(a)(9) of the Code and paragraphs (b) and (c) of this section, the domestic content bonus credit amount provided by section 48(a)(12) of the Code, and the increase in credit rate for energy communities provided in section 48(a)(14) of the Code, the term *energy project* means one or more energy properties (multiple energy properties) that are operated as part of a single energy project. Multiple energy properties will be treated as one energy project if, at any point during the construction of the multiple energy properties, they are owned by a single taxpayer (subject to the related taxpayer rule provided in paragraph (d)(2) of this section) and any two or more of the following factors are present:

(i) The energy properties are constructed on contiguous pieces of land;

(ii) The energy properties are described in a common power purchase, thermal energy, or other off-take agreement or agreements;

(iii) The energy properties have a common intertie;

(iv) The energy properties share a common substation, or thermal energy off-take point;

(v) The energy properties are described in one or more common environmental or other regulatory permits;

(vi) The energy properties are constructed pursuant to a single master construction contract; or

(vii) The construction of the energy properties are financed pursuant to the same loan agreement.

(2) *Related taxpayers*—(i) *Definition.* For purposes of this section, the term *related taxpayers* means members of a group of trades or businesses that are under common control (as defined in § 1.52–1(b)).

(ii) *Related taxpayer rule.* For purposes of this section, related taxpayers are treated as one taxpayer in determining whether multiple energy properties are treated as an energy project with respect to which a section 48 credit may be determined.

(3) *Consistent treatment as an energy project.* If multiple energy properties are treated as a single energy project for beginning of construction purposes with respect to the section 48 credit, the multiple energy properties will also be treated as a single energy project for purposes of the prevailing wage and apprenticeship requirements, the domestic content bonus credit amount, and the increase in section 48 credit rate for energy communities.

(e) *Nameplate capacity for purposes of the One-Megawatt Exception.* For purposes of paragraph (b)(1) of this section, the determination of whether an energy project has a maximum net output of less than 1 MW of electrical (as measured in alternating current) or thermal energy is determined based on the nameplate capacity. Where applicable, taxpayers should use the International Standard Organization (ISO) conditions to measure the maximum electrical generating output or usable energy capacity of an energy project. Paragraphs (e)(1) through (5) of this section provide rules for applying the One-Megawatt Exception (as provided in paragraph (b)(1) of this section) to different types of energy properties. Because electrochromic glass

property (as defined in § 1.48–9(e)(2)(ii)), fiber-optic solar energy property (as defined in § 1.48–9(e)(2)(i)), and microgrid controllers (as defined in § 1.48–9(e)(12)) do not generate electricity or thermal energy, these energy properties are not eligible for the One-Megawatt Exception.

(1) *Electrical generating energy property.* In the case of an electrical generating energy property, the maximum electrical generating output in MW that the unit of energy property is capable of producing on a steady state basis and during continuous operation under standard conditions, as measured by the manufacturer and consistent with the definition of nameplate capacity provided in 40 CFR 96.202.

(2) *Electrical energy storage property.* In the case of electrical energy storage property (as defined in § 1.48–9(e)(10)(ii)), the storage device's maximum net output.

(3) *Thermal energy storage property and other property generating thermal energy.* In the case of thermal energy storage property (as defined in § 1.48–9(e)(10)(iii)) and other energy property that generates thermal energy for productive use (for example, direct geothermal use, geothermal heat pumps, solar process heating), a taxpayer must use the equivalent of 3.4 million British Thermal Units per hour (mmBtu/hour) for heating and 284 tons for cooling can be used to determine if the thermal storage property satisfies the One-Megawatt Exception (Btu per hour/3,412,140 = MW). For projects delivering thermal energy to a building or buildings, this can be assessed as either the aggregate maximum thermal output of all individual heating or cooling elements within the building or buildings, or as the maximum thermal output that the entire project is capable of delivering to a building or buildings at any given moment.

(4) *Hydrogen energy storage property and specified clean hydrogen production facilities.* A hydrogen energy storage property (as defined in § 1.48–9(e)(10)(iv)) or a specified clean hydrogen production facility (as defined in section 48(a)(15)(C) of the Code) must have a maximum net output of less than 3.4 mmBtu/hour of hydrogen or equivalently 10,500 standard cubic feet (scf) per hour of hydrogen to satisfy the One-Megawatt Exception.

(5) *Qualified biogas property.* In the case of qualified biogas property, 3.4 mmBtu/hour can be used as equivalent to the One-Megawatt Exception. Taxpayers may convert the maximum net output of 3.4 mmBtu/hour into an equivalent maximum net volume flow in scf per hour using the appropriate high heat value conversion factors found in the EPA GHGRR at table C–1 to subpart C of part 98 (40 CFR part 98). Otherwise, taxpayers may calculate their own equivalent volumetric flow if the heat content of the gas is known.

(f) *Applicability date*—(1) *In general.* Except as provided in paragraph (f)(2) of this section, this section applies to projects placed in service in taxable years ending on or after the date final regulations are published in the **Federal Register**, and the construction of which begins after the date final regulations are published in the **Federal Register**.

(2) *Exception.* Paragraph (d) of this section applies to energy projects the construction of which begins after November 22, 2023.

■ **Par. 4.** Section 1.48–14 is added to read as follows:

§ 1.48–14 Rules applicable to energy property.

(a) *Retrofitted energy property*—(1) *In general.* For purposes of section 48(a)(3)(B)(ii), (a)(5)(D)(iv), and (a)(8)(B)(iii) of the Internal Revenue Code (Code), a retrofitted energy property may be originally placed in service even though it contains some used components of the unit of energy property only if the fair market value of the used components of the unit of energy property is not more than 20 percent of the total value of the unit of energy property taking into account the cost of the new components of property plus the value of the used components of the unit of energy property (80/20 Rule). Only expenditures paid or incurred that relate to the new components of the unit of energy property are taken into account for purposes of computing the energy credit determined under section 48 (section 48 credit) with respect to the unit of energy property. The cost of new components of the unit of energy property includes all costs properly included in the depreciable basis of the new components. If the taxpayer satisfies the 80/20 Rule with regard to the unit of energy property and the taxpayer pays or incurs new costs for property that is an integral part of the energy property (as defined in § 1.48–9(f)(3)(i)), the taxpayer may include the new costs paid or incurred for property that is an integral part of the energy property (as defined in § 1.48–9(f)(3)(i)) in the basis of the energy property for purpose of the section 48 energy credit. Further, in the case of an energy project (as defined in § 1.48–13(d)), the 80/20 Rule is applied to each unit of energy property comprising an energy project.

(2) *Excluded costs.* Costs incurred for new components of property added to used components of a unit of energy property may not be taken into account for purposes of the section 48 credit unless the taxpayer satisfies the 80/20 Rule (as provided in paragraph (a)(1) of this section) by placing into service a unit of energy property for which the fair market value of the used components of property is not more than 20 percent of the total value of the unit of energy property taking into account the cost of the new components of property plus the value of the used components of property.

(3) *Examples.* This paragraph (a)(3) provides examples illustrating the provisions of this paragraph (a):

(i) *Example 1. Retrofitted solar energy property that satisfies the 80/20 Rule.* Z owns an existing solar energy property for which the section 48 credit has been claimed and the recapture period for the section 48 credit has elapsed. Z replaces used components of the solar energy property with new components of property at a cost of $1.4 million. The retrofitted solar energy property constitutes a unit of energy property. The fair market value of the remaining original components of the retrofitted solar energy property is $100,000, which is not more than 20% of the retrofitted solar energy property's total value of $1.5 million (the cost of the new components ($1.4 million) + the value of the remaining original components ($100,000)). The value of the old components of the retrofitted solar energy property is $100,000/$1.5 million (7% of the value of total value of the retrofitted solar energy property), thus the retrofitted solar energy property will be considered newly placed in service for purposes of section 48, and Z will be able to claim a section 48 credit based on the cost of the new components ($1.4 million).

(ii) *Example 2. Capital improvements to an existing energy property that do not satisfy the 80/20 Rule.* X owns an existing unit of energy property for which the section 48 credit has been claimed and the recapture period for the section 48 credit has elapsed. The fair market value of the unit of energy property is $1 million. During the tax year, X makes capital improvements to the unit of energy property. The expenditures for such capital improvements total $300,000. X may not claim a section 48 credit for the $300,000 spent on capital improvements during the tax year because the capital improvements did not satisfy the 80/20 Rule.

(b) *Dual use property*—(1) *Definition.* For purposes of section 48, the term *dual use property* means property that uses energy derived from both a

qualifying source (that is, from an energy property defined in § 1.48–9(a) (including a qualified facility for which an election has been made as provided by paragraph (f)(1) of this section)) and from a non-qualifying source (that is, sources other than an energy property defined in § 1.48–9(a) (including a qualified facility for which an election has been made as provided by paragraph (f)(1) of this section)).

(2) *Qualification as energy property*—(i) *In general.* If dual use property meets each of the requirements of this paragraph (b), it will qualify as energy property if its use of energy from non-qualifying sources does not exceed 50 percent of its total energy input (as determined under the rules of paragraph (b)(2)(ii) of this section) during an annual measuring period (as defined in paragraph (b)(2)(iii) of this section). If the energy used from qualifying sources is between 50 percent and 100 percent, only a proportionate amount of the eligible basis of the energy property will be taken into account in computing the amount of the section 48 credit (for example, if 80 percent of the energy used by a dual use property is from qualifying sources, 80 percent of the basis of the dual use property will be taken into account in computing the amount of the section 48 credit).

(ii) *Aggregation of energy inputs.* The measurement of energy use required for purposes of paragraph (b)(2)(i) of this section may be made by comparing, on the basis of British thermal units (Btus), energy input to dual use property from all qualifying sources with energy input from all non-qualifying sources. The Commissioner may also accept any other method that accurately establishes the relative annual use of energy derived from all qualifying sources and of energy input from all non-qualifying sources by dual use property.

(iii) *Annual measuring period.* For purposes of paragraph (b)(2)(i) of this section, the term *annual measuring period* means with respect to an item of dual use property the 365-day period (366-day period in case of a leap year) beginning with the day the dual use property is placed in service or a 365-day period (366-day period in case of a leap year) beginning the day after the last day of the immediately preceding annual measuring period.

(iv) *Recapture.* If, for a taxable year (within the recapture period specified in section 50(a) of the Code) subsequent to the taxable year that a dual use property was placed in service, the equipment's use of energy from all qualifying sources is reduced below 50 percent of its total energy input (as determined under the rules of paragraph (b)(2)(i) of this section), then recapture of the section 48 credit is required under section 50(a).

(c) *Energy property eligible for multiple Federal income tax credits*—(1) *In general.* For purposes of this section, the basis of energy property may be eligible for calculating both the section 48 credit and another Federal income tax credit, subject to the limitation provided in paragraph (c)(2) of this section.

(2) *Limitation.* A taxpayer that owns energy property that is eligible for both the section 48 credit and another Federal income tax credit is eligible for the section 48 credit only to the extent the other Federal income tax credit was not claimed with respect to the taxpayer's eligible basis in the energy property. Except as provided in paragraph (f)(2) of this section, in no event may a taxpayer claim both a section 48 credit and another Federal income tax credit with respect to the same eligible basis in an energy property. See paragraph (e) of this section for special rules regarding ownership of energy property.

(d) *Incremental cost*—(1) *In general.* For purposes of this section, only the incremental cost of energy property is included in the eligible basis of the energy property. The term *incremental cost* means the excess of the total cost of energy property over the amount that would have been expended for the energy property if the energy property were not used for a qualifying purpose.

(2) *Example.* A installs solar energy property above the surface of an existing roof of a building that A owns. The solar energy property uses bifacial panels that convert to energy the light that strikes both the front and back of the panels if installed over a highly reflective surface that is affixed to a roof (reflective roof). The cost of the reflective roof is $15,000 whereas the cost of a standard roof for the building would be $10,000. The reflective roof does not include the portions of the existing roof that will be replaced, and any features of the roof not directly related to establishing, improving, and maintaining the efficiency of the reflective roof. Accordingly, the reflective roof, if installed in connection with the solar energy property, constitutes energy property under section 48. The incremental cost of the reflective roof is $5,000, and that amount is A's eligible basis in the solar energy property for purposes of the section 48 credit.

(e) *Special rules concerning ownership*—(1) *Eligible basis.* For purposes of this section, a taxpayer that owns an energy property is eligible for the section 48 credit only to the extent of the taxpayer's eligible basis in the energy property. In the case of multiple taxpayers holding direct ownership in an energy property, each taxpayer determines its eligible basis based on its fractional ownership interest in the energy property.

(2) *Multiple owners.* A taxpayer must directly own at least a fractional interest in the entire unit of energy property for a section 48 credit to be determined with respect to such taxpayer's interest. No section 48 credit may be determined with respect to a taxpayer's ownership of one or more separate components of an energy property if the components do not constitute a unit of energy property. However, the use of property owned by one taxpayer that is an integral part of an energy property owned by a second taxpayer will not prevent a section 48 credit from being determined with respect to the second taxpayer's energy property.

(3) *Related taxpayers*—(i) *Definition.* For purposes of this section, the term *related taxpayers* means members of a group of trades or businesses that are under common control (as defined in § 1.52–1(b)).

(ii) *Related taxpayer rule.* For purposes of this section, related taxpayers are treated as one taxpayer in determining whether a taxpayer has made an investment in an energy property with respect to which a section 48 credit may be determined.

(4) *Examples.* The following examples illustrate the rules in this paragraph (e). In each example, X and Y are unrelated taxpayers.

(i) *Example 1. Fractional ownership required to satisfy section 48.* X and Y own fractional ownership interests in a geothermal heat pump equipment that is a unit of energy property. Because X and Y each own a fractional ownership interest in a unit of energy property, a section 48 credit may be determined with respect to X's and Y's fractional ownership interests in the unit of energy property.

(ii) *Example 2. Ownership of separate components.* X and Y own separate components of a geothermal heat pump equipment, which taken together is a unit of energy property. X owns the coils in the ground and Y owns the heat pump. No section 48 credit may be determined with respect to either X or Y because each owns a separate component of energy property that does not constitute a unit of energy property as defined in § 1.48–9(f)(2).

(iii) *Example 3. Shared ownership of property that is an integral part of separate energy properties.* X owns a wind energy property that is a unit of energy property and Y owns a solar energy property that is a unit of energy

property that are co-located. Both X's wind energy property and Y's solar energy property connect to a substation that houses a step-up transformer where the electricity is stepped up to electrical grid voltage before being transmitted to the electrical grid through an intertie. X and Y each own a 50% fractional ownership interest in the step-up transformer. The step-up transformer is an integral part of both the wind energy property and the solar energy property (as defined in § 1.48–9(f)(3)(i). As a result, X and Y may both compute a section 48 credit for their respective energy properties by including 50% of the costs of the step-up transformer.

(iv) *Example 4. Separate ownership of property that is an integral part of separate energy property.* X owns a wind energy property that is a unit of energy property and property that is an integral part of the wind energy property, specifically a transformer where the electricity is stepped up to electrical grid voltage before being transmitted to the electrical grid through an intertie. Y owns a solar energy property that is a unit of energy property that connects to X's transformer. Because Y does not hold an ownership interest in the transformer, Y may compute its section 48 credit for its solar energy property but it will not include any costs relating to the transformer.

(f) *Coordination with other Code provisions.* Paragraphs (f)(1) through (7) of this section provide rules applicable to the election under section 48(a)(5)(C) to treat certain facilities as energy property eligible for a section 48 credit in lieu of a renewable electricity production credit under section 45 of the Code (section 45 credit). Paragraph (f)(8) of this section provides a coordination rule for property with respect to which both a section 48 credit and a low-income housing credit under section 42 of the Code (section 42 credit) may be determined.

(1) *Election to treat qualified facilities as energy property.* If a taxpayer makes an election under section 48(a)(5)(C) of the Code (pursuant to the requirements in paragraph (f)(6) of this section) to treat qualified property (as defined in paragraph (f)(2) of this section) that is part of a qualified investment credit facility (as defined in paragraph (f)(4) of this section) as energy property with respect to which a section 48 credit may be determined, such property will be treated as energy property for purposes of section 48. No section 45 credit may be determined with respect to any such qualified investment credit facility and the requirements of section 45 are not imposed on a qualified investment credit facility. No credit under sections 45Q or 45V of the Code may be determined with respect to either any carbon capture equipment included in a qualified investment credit facility or any specified clean hydrogen production facility.

(2) *Qualified property.* For purposes of this paragraph (f), the term *qualified property* means property that meets each of the requirements of paragraphs (f)(2)(i) through (iii) of this section:

(i) The property is tangible personal property (as defined in paragraph (f)(3)(i) of this section) or other tangible property (not including a building or its structural components) (as defined in paragraph (f)(3)(ii) of this section), but only if such other tangible property is used as an integral part (as defined paragraph (f)(3)(iii) of this section) of the qualified investment credit facility (as defined in paragraph (f)(4) of this section).

(ii) Depreciation (or amortization in lieu of depreciation) is allowable (as defined in § 1.48–9(b)(4)) with respect to the property.

(iii) The taxpayer constructs, reconstructs, or erects the property (as defined in § 1.48–9(b)(1)) or acquires the property (as defined in § 1.48–9(b)(2)) if the original use of the property (as defined in § 1.48–9(b)(3)) commences with the taxpayer.

(3) *Definitions related to requirements for qualified property.* For purposes of section 48 of the Code and this paragraph (f), the definitions of this paragraph (f)(3) apply:

(i) *Tangible personal property.* The term *tangible personal property* means any tangible property except land and improvements thereto, such as buildings or other inherently permanent structures (including items that are structural components of such buildings or structures). Tangible personal property includes all property (other than structural components) that is contained in or attached to a building. Further, all property that is in the nature of machinery (other than structural components of a building or other inherently permanent structure) is considered tangible personal property even though located outside a building. Local law is not controlling for purposes of determining whether property is or is not tangible property or tangible personal property. Thus, tangible property may be personal property for purposes of the energy credit even though under local law the property is considered to be a fixture and therefore real property.

(ii) *Other tangible property.* The term *other tangible property* means tangible property other than tangible personal property (not including a building and its structural components), that is used as an integral part of furnishing electrical energy by a person engaged in a trade or business of furnishing any such service.

(iii) *Integral part*—(A) *In general.* Property owned by a taxpayer is an integral part of a qualified investment credit facility owned by the same taxpayer if it is used directly in the intended function of the qualified investment credit facility and is essential to the completeness of the intended function of the qualified investment credit facility. A taxpayer may not claim the section 48 credit for any property that is an integral part of the taxpayer's qualified investment credit facility that is not owned by the taxpayer.

(B) *Power conditioning and transfer equipment.* Property that is an integral part of a qualified investment credit facility includes power conditioning equipment and transfer equipment used to perform the intended function of the qualified investment credit facility. Power conditioning equipment includes, but is not limited to, transformers, inverters, and converters, which modify the characteristics of electricity or thermal energy into a form suitable for use or transmission or distribution. Parts related to the functioning or protection of power conditioning equipment are also treated as power conditioning equipment and include, but are not limited to, switches, circuit breakers, arrestors, and hardware and software used to monitor, operate, and protect power conditioning equipment. Transfer equipment includes equipment that permits the aggregation of energy generated by components of energy properties and equipment that alters voltage in order to permit transfer to a transmission or distribution line. Transfer equipment does not include transmission or distribution lines. Examples of transfer equipment include, but are not limited to, wires, cables, and combiner boxes that conduct electricity. Parts related to the functioning or protection of transfer equipment are also treated as transfer equipment and may include items such as current transformers used for metering, electrical interrupters (such as circuit breakers, fuses, and other switches), and hardware and software used to monitor, operate, and protect transfer equipment.

(C) *Roads.* Roads that are an integral part of a qualified investment credit facility are integral to the activity performed by the qualified investment credit facility; these include onsite roads that are used for equipment to

operate and maintain the qualified investment credit facility. Roads primarily for access to the site, or roads used primarily for employee or visitor vehicles, are not integral to the activity performed by a qualified investment credit facility.

(D) *Fences.* Fencing is not an integral part of an energy property because it is not integral to the activity performed by the energy property.

(E) *Buildings.* Generally, buildings are not integral parts of a qualified investment credit facility because they are not integral to the activity of the qualified investment credit facility. However, the following structures are not treated as buildings for this purpose:

(*1*) A structure that is essentially an item of machinery or equipment.

(*2*) A structure that houses property that is integral to the activity of a qualified investment credit facility if the use of the structure is so closely related to the use of the housed qualified investment credit facility that the structure clearly can be expected to be replaced when the qualified investment credit facility it initially houses is replaced.

(4) *Qualified investment credit facility.* The term *qualified investment credit facility* means any facility—

(i) That is a qualified facility (within the meaning of section 45) described in section 45(d)(1) through (4), (6), (7), (9) or (11) of the Code;

(ii) That meets the placed in service and beginning of construction requirements (if any) provided in section 48 of the Code;

(iii) With respect to which no credit has been allowed under section 45 of the Code; and

(iv) For which the taxpayer makes an irrevocable election under section 48(a)(5) of the Code and paragraph (f)(1) of this section.

(5) *Intangibles excluded.* Intangible property is not qualified property for purposes of section 48(a)(5)(D) of the Code and paragraph (f) of this section.

(6) *Time and manner of making election*—(i) *In general.* To make an election under section 48(a)(5) of the Code and paragraph (f)(1) of this section to treat a qualified facility as a qualified investment credit facility, a taxpayer must claim the section 48 credit with respect to such qualified investment credit facility on a completed Form 3468, *Investment Credit,* or any successor form(s), and file such form with the taxpayer's timely filed (including extensions) Federal income tax return for the taxable year in which the qualified investment credit facility is placed in service. The taxpayer must also attach a statement to its Form 3468, or any successor forms(s), filed with its timely filed Federal income tax return (including extensions) that includes all of the information required by the instructions to Form 3468, or any successor form(s) for each qualified investment credit facility subject to an election under section 48(a)(5) and paragraph (f)(1) of this section. A separate election must be made for each qualified facility that meets the requirements provided in paragraph (f)(2) of this section to be treated as a qualified investment credit facility. If any taxpayer owning an interest in a qualified facility makes an election with respect to such qualified facility, that election is binding on all taxpayers that directly or indirectly own an interest in the qualified facility.

(ii) *Special rule for partnerships and S corporations.* In the case of a qualified facility owned by a partnership or an S corporation, the election under paragraph (f)(1) of this section is made by the partnership or S corporation and is binding on all ultimate section 48 credit claimants (as defined in § 1.50–1(b)(3)(ii)). The partnership or S corporation must file a Form 3468, or any successor forms(s), with its timely filed partnership or S corporation return (including extensions) with respect to Federal income tax for the taxable year in which the qualified investment credit facility is placed in service to indicate that it is making the election and attach a statement that includes all of the information required by the instructions to Form 3468, or any successor form(s) for each qualified facility subject to the election. The ultimate credit claimants must claim the section 48 credit on a completed Form 3468, or any successor form(s), and file such form with a timely filed (including extensions) Federal income tax return for the taxable year that ends with or within the taxable year in which the partnership or S corporation made the election. The partnership or S corporation making the election must provide the ultimate credit claimants with the necessary information to complete Form 3468, or any successor form(s), to claim the energy credit.

(7) *Election irrevocable.* The election under section 48(a)(5) of the Code and paragraph (f)(1) of this section to treat a qualified facility as an energy property is irrevocable.

(8) *Coordination rule for sections 42 and 48 credits.* As provided under section 50(c)(3)(C) of the Code, in the case of a taxpayer determining eligible basis for purposes of calculating a section 42 credit, a taxpayer is not required to reduce its basis in an energy property by the amount of the section 48 credit determined with respect to the property. The basis of an energy property may be used to determine a section 48 credit and may also be included in eligible basis when determining a section 42 credit. See paragraph (e) of this section for special rules regarding ownership of energy property.

(g) *Rules for certain lower-output energy properties to include qualified interconnection costs in the basis of associated energy property*—(1) *In general.* For purposes of determining the section 48 credit, energy property includes amounts paid or incurred by the taxpayer for qualified interconnection property (as defined in paragraph (g)(2) of this section), in connection with the installation of energy property (as defined in § 1.48–9(a)) that has a maximum net output of not greater than 5 MW (as measured in alternating current) (as described in paragraph (g)(3) of this section). The qualified interconnection property must provide for the transmission or distribution of the electricity produced or stored by such energy property and must be properly chargeable to the capital account of the taxpayer as reduced by paragraph (g)(6) of this section.

(2) *Qualified interconnection property.* The term *qualified interconnection property* means, with respect to an energy project that is not a microgrid controller, any tangible property that is part of an addition, modification, or upgrade to a transmission or distribution system that is required at or beyond the point at which the energy project interconnects to such transmission or distribution system in order to accommodate such interconnection; is either constructed, reconstructed, or erected by the taxpayer, (as defined in § 1.48–9(b)(1)), or for which the cost with respect to the construction, reconstruction, or erection of such property is paid or incurred by such taxpayer; and the original use (as defined in § 1.48–9(b)(3)), of which, pursuant to an interconnection agreement (as defined in paragraph (g)(4) of this section), commences with a utility (as defined in paragraph (g)(5) of this section). Qualified interconnection property is not part of an energy property. As a result, qualified interconnection property is not taken into account in determining whether an energy property satisfies the requirements for the domestic content bonus credit amount referenced in section 48(a)(12) of the Code and the increase in credit rate for energy communities provided in section 48(a)(14) of the Code.

(3) *Five-Megawatt Limitation*—(i) *In general.* The Five-Megawatt Limitation is measured at the level of the energy property in accordance with section 48(a)(8)(A) of the Code. The maximum net output of an energy property is measured only by nameplate generating capacity of the unit of energy property at the time the energy property is placed in service.

(ii) *Nameplate capacity for purposes of the Five-Megawatt Limitation.* The determination of whether an energy property has a maximum net output of not greater than 5 MW (as measured in alternating current) is based on the nameplate capacity for purposes of paragraph (g)(1) of this section. Where applicable, taxpayers should use the International Standard Organization (ISO) conditions to measure the maximum electrical generating output or usable energy capacity of an energy property. Paragraphs (g)(3)(i)(A) and (B) of this section, provide rules for applying the Five-Megawatt Limitation (as provided in paragraph (g)(1) of this section) to electrical generating energy property and electrical energy storage property, respectively.

(A) *Electrical generating energy property.* In the case of an electrical generating energy property, the maximum electrical generating output in MW that the unit of energy property is capable of producing on a steady state basis and during continuous operation under standard conditions, as measured by the manufacturer and consistent with the definition of nameplate capacity provided in 40 CFR 96.202.

(B) *Electrical energy storage property.* In the case of electrical energy storage property (as defined in § 1.48–9(e)(10)(ii)), the storage device's maximum net output is its nameplate capacity.

(4) *Interconnection agreement.* The term *interconnection agreement* means an agreement with a utility for the purposes of interconnecting the energy property owned by such taxpayer to the transmission or distribution system of the utility.

(5) *Utility.* For purposes of section 48(a)(8) of the Code and this paragraph (g), the term *utility* means the owner or operator of an electrical transmission or distribution system that is subject to the regulatory authority of a State or political subdivision thereof, any agency or instrumentality of the United States, a public service or public utility commission or other similar body of any State or political subdivision thereof, or the governing or ratemaking body of an electric cooperative.

(6) *Reduction to amounts chargeable to capital account.* In the case of expenses paid or incurred for qualified interconnection property as defined in paragraph (g)(2) of this section, amounts otherwise chargeable to capital account with respect to such expenses must be reduced under rules similar to the rules of section 50(c) of the Code. In addition, the taxpayer must pay or incur the interconnection property costs; therefore, any reimbursement, including by a utility, must be accounted for by reducing taxpayers' expenditure when determining eligible costs.

(7) *Examples.* This subparagraph provides examples illustrating the application of the Five-Megawatt Limitation provided in this paragraph (g).

(i) *Example 1. Application of Five-Megawatt Limitation to an interconnection agreement for energy properties owned by separate taxpayers.* X places in service a solar energy property (Solar Property) with a maximum net output of 5 MW (as measured in alternating current). Y places in service a qualified wind facility (Wind Facility), for which Y has made a valid election under section 48(a)(5) of the Code to elect the section 48 credit in lieu of the section 45 credit, with a maximum net output of 5 MW (as measured in alternating current). The Solar Property and the Wind Facility are separate units of energy property installed on contiguous pieces of land and connect to the grid through a common intertie. As part of the development of the Solar Property and Wind Facility, interconnection costs are required by the utility to modify and upgrade the transmission system at or beyond the common intertie to the utility's transmission system to accommodate such interconnection. X and Y are party to the same interconnection agreement with the utility that allows for a maximum output of 10 MW (as measured in alternating current). The interconnection agreement provides the total cost of the qualified interconnection property. X and Y may include the costs paid or incurred by X and Y, respectively, for qualified interconnection property subject to the terms of the interconnection agreement, when calculating their respective section 48 credits for the Solar Property and the Wind Facility because each has a maximum net output of not greater than 5 MW.

(ii) *Example 2. Application of Five-Megawatt Limitation to an interconnection agreement for a single energy property.* X develops three solar energy properties located in close proximity. The three solar energy properties are not considered an energy project pursuant to the definition in § 1.48–13(d). Each of the solar energy properties is a unit of energy property and has a maximum net output of 4 MW (as measured in alternating current). Electricity that is suitable for use or transmission (and is not further conditioned) from the three solar energy properties feeds into a single gen-tie line and a common intertie. X is party to a separate interconnection agreement with the utility for each solar energy property and each interconnection agreement allows for a maximum output of 4 MW (as measured in alternating current). X may include the costs it paid or incurred for qualified interconnection property for each solar energy property when calculating its section 48 credit for each of the three solar energy properties, subject to the terms of each interconnection agreement, because each of the solar energy properties has a maximum net output of not greater than 5 MW.

(iii) *Example 3. Application of Five-Megawatt Limitation to a single interconnection agreement for multiple energy properties.* The facts are the same as Example 2, except that X is party to one interconnection agreement with the utility with respect to the three solar energy properties and the interconnection agreement allows for a maximum output of 12 MW (as measured in alternating current). With respect to each of the three solar energy properties, X may include the costs it paid or incurred for qualified interconnection property for each solar energy property when calculating its section 48 credit for each of the three solar energy properties, subject to the terms of the interconnection agreement, because each of the solar energy properties has a maximum net output of not greater than 5 MW.

(iv) *Example 4. Application of Five-Megawatt Limitation to an Energy Project.* The facts are the same as Example 3, except that the three solar energy properties are also subject to a common power purchase agreement and as a result, are considered an energy project (as defined in § 1.48–13(d)). With respect to each of the three solar energy properties, X may include the costs it paid or incurred for qualified interconnection property when calculating its section 48 credit for each of the three solar energy properties, subject to the terms of the interconnection agreement, because each of the solar energy properties has a maximum net output of no greater than 5 MW.

(h) *Cross references.* (1) For rules regarding the coordination of the section

42 credit and section 48 credit, see section 50(c)(3) of the Code.

(2) For rules regarding the denial of double benefit for qualified biogas property, see section 45(e) of the Code.

(3) To determine applicable recapture rules, see section 50(a) of the Code.

(4) For rules regarding the credit eligibility of property used outside the United States, see section 50(b)(1) of the Code.

(5) For rules regarding the credit eligibility of property used by certain tax-exempt organizations, see section 50(b)(3) of the Code. See section 6417(d)(2) of the Code for an exception to this rule in the case of an applicable entity making an elective payment election.

(6) For application of the normalization rules to the section 48 credit when taken by certain regulated companies, including rules regarding the election not to apply the normalization rules to energy storage technology (as defined in section 48(c)(6) of the Code), see section 50(d)(2) of the Code.

(i) *Applicability date.* This section applies with respect to property placed in service after December 31, 2022, and during a taxable year beginning after [DATE OF PUBLICATION OF FINAL RULE].

■ **Par. 5.** Section 1.6418–5, as proposed to be added at 88 FR 40496, June 21, 2023, is amended by:

■ 1. Redesignating paragraphs (f) through (h) as paragraphs (g) through (i).

■ 2. Adding new paragraph (f).

The addition reads as follows:

§ 1.6418–5 Special rules.

* * * * *

(f) *Notification and impact of recapture under section 48(a)(10)(C) of the Code*—(1) *In general.* In the case of any election under § 1.6418–2 or § 1.6418–3 with respect to any specified credit portion described in § 1.6418–1(c)(2)(iii), if, during any taxable year, there is recapture under section 48(a)(10)(C) of the Code and § 1.48–13(c)(3) of any increased credit amount under section 48(a)(9)(B)(iii) before the close of the recapture period (as described in § 1.48–13(c)(3)(E)), such eligible taxpayer and the transferee taxpayer must follow the notification process in paragraph (f)(2) of this section with recapture impacting the transferee taxpayer as described in paragraph (f)(3) of this section.

(2) *Notification requirements.* The notification requirements for the eligible taxpayer are the same as for an eligible taxpayer that must report a recapture event as described in paragraph (d)(2)(i) of this section, except that the recapture amount that must be computed is defined in § 1.48–13(c)(3)(D).

(3) *Impact of recapture.* The transferee taxpayer is responsible for any amount of tax increase under section 48(a)(10)(C) of the Code and § 1.48–13(c)(3) upon the occurrence of a recapture event under § 1.48–13(c)(3)(B).

(4) *Applicability date.* This section applies to taxable years ending on or after [DATE OF PUBLICATION OF FINAL RULE].

* * * * *

Douglas W. O'Donnell,

Deputy Commissioner for Services and Enforcement.

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