Part III – Administrative, Procedural, and Miscellaneous

Domestic Content Bonus Credit Amounts under the Inflation Reduction Act of 2022: First Updated Elective Safe Harbor modifying Notice 2024-41

Notice 2025-08

SECTION 1. PURPOSE

This notice provides an updated elective safe harbor for the domestic content bonus credit (First Updated Elective Safe Harbor) that modifies the safe harbor provided in IRS Notice 2024-41, 2024-24 I.R.B. 1615 (Notice 2024-41), including the table provided in section 4.04(1)-(3) (Table 1), in the five ways described below in section 3 of this notice. Table 1 provided the Assigned Cost Percentages for each Manufactured Product and Manufactured Product Component to provide taxpayers clarity in applying the new elective safe harbor (New Elective Safe Harbor) outlined in Notice 2024-41. Taxpayers, including entities that make elective payment elections under § 6417 of the Internal Revenue Code (Code),[1] may elect to use the First Updated Elective Safe Harbor in lieu of the Domestic Manufactured Products and Components Cost and Total Manufactured Products Cost provisions of the Adjusted Percentage Rule in section

[1] Unless otherwise specified, all "section" or "§" references are to sections of the Code or the Income Tax Regulations (26 CFR part 1).

3.03(2)(b) and (c) of Notice 2023-38, 2023-22 I.R.B. 872 (Notice 2023-38), which require taxpayers to use the manufacturer's direct costs of producing Manufactured Products and Manufactured Product Components in an Applicable Project.[2] Taxpayers who elect to use the First Updated Elective Safe Harbor for any Applicable Project must use one of the respective tables provided below in sections 5-7 of this notice subject to the conditions described in section 8 of this notice, also provided below.

SECTION 2. BACKGROUND

Public Law 117-169, 136 Stat. 1818 (August 16, 2022), commonly known as the Inflation Reduction Act of 2022 (IRA), amended §§ 45 and 48 to provide a domestic content bonus credit amount for certain qualified facilities or energy projects placed in service after December 31, 2022, and added new §§ 45Y and 48E, which include a domestic content bonus credit amount for certain investments in qualified facilities or energy storage technologies placed in service after December 31, 2024.

.01 Notice 2023-38. On May 12, 2023, the Treasury Department and the IRS released Notice 2023-38, which states that the Treasury Department and the IRS intend to propose regulations for rules that taxpayers must satisfy to qualify for the domestic content bonus credit amounts under §§ 45, 45Y, 48, and 48E. Notice 2023-38 also describes a safe harbor regarding the classification of certain Applicable Project Components in representative types of qualified facilities, energy projects, or energy storage technologies.

.02 Notice 2024-41. On May 24, 2024, the Treasury Department and the IRS released Notice 2024-41, which, among other things, modified the existing domestic

[2] Unless otherwise specified, capitalized terms used throughout this notice are defined in Notice 2023-38 and Notice 2024-41. The term "Applicable Project" includes a qualified facility described in § 45Y(b)(1)(C) or § 48E(b)(3)(B)(i).

content safe harbor in Notice 2023-38 by (i) expanding the non-exclusive list of Applicable Projects in "Table 2--Categorization of Applicable Project Components" from Notice 2023-38 to include hydropower and pumped hydropower storage facilities; (ii) replacing "Utility scale photovoltaic system" with "Ground-mount and rooftop photovoltaic system"; and (iii) including certain Manufactured Product Components for previously listed Applicable Projects.

Notice 2024-41 further provided an elective safe harbor in Table 1 of section 4.04(1)-(3) that taxpayers may use to classify the identified Applicable Project Components. Table 1 also provided the Assigned Cost Percentages for each of the identified Manufactured Products and Manufactured Product Components that may be found in the identified Applicable Projects, which include solar photovoltaic (PV) systems, land-based wind facilities, and battery energy storage technologies. The Assigned Cost Percentage for each of the identified Manufactured Products and Manufactured Product Components in Table 1 was obtained from DOE for purposes of calculating the Domestic Cost Percentage and satisfying the Adjusted Percentage Rule and will be accepted by the IRS for those Manufactured Products and Manufactured Product Components for taxpayers that are eligible to rely on Notice 2024-41. Finally, Notice 2024-41 provided requirements for taxpayers that elect to use the New Elective Safe Harbor to classify the identified Applicable Project Components listed in Table 1 and to calculate the Domestic Cost Percentage.

SECTION 3. OVERVIEW OF MODIFICATIONS TO NOTICE 2024-41

The First Updated Elective Safe Harbor modifies Notice 2024-41 in five ways.

First, section 5 of this notice provides several modifications to Notice 2024-41, including expanding the Solar PV Table of Table 1 into two distinct tables, one for Photovoltaic (PV) Ground-mount (Tracking and Fixed) Applicable Projects and one for PV Rooftop (MLPE and String) Applicable Projects, and providing updated associated cost percentages for each table (Updated Assigned Cost Percentages for PV Solar)[3], including those within the new columns in each table that provide a second set of associated cost percentages for employing PV modules that incorporate crystalline silicon photovoltaic (c-Si PV) cells and wafers that are manufactured in the United States. See sections 5.05 and 5.06 of this notice. The Updated Assigned Cost Percentages for PV Solar provided in the new columns specific to projects that use c-Si PV cells made with domestically produced wafers increase accuracy beyond Table 1 by accounting for the expected significant cost premium this type of cell would carry. There are no additional associated cost percentages for other types of PV cells because DOE assesses that the existing cost percentages, as updated in this notice, adequately capture the costs of other types of PV cells.

Second, section 6 of this notice modifies the Land-Based Wind Table from Table 1 by renaming the term (i) “Steel or iron rebar in foundation,” which is listed as an Applicable Project Component in Table 1, to “Steel or iron reinforcing products in foundation,” and (ii) the term “Material,” which is listed as a Manufactured Product Component in Table 1, to “Preform.” Regarding the associated cost percentages for

[3] For purposes of the First Updated Elective Safe Harbor, the Updated Assigned Cost Percentages for PV Solar, defined in section 3 of this notice, the associated cost percentages for the Land-Based Wind, which are the same cost values as the Assigned Cost Percentages provided in Notice 2024-41, and the Updated Assigned Cost Percentages for BESS, defined in section 7 below, are collectively defined as the Updated Assigned Cost Percentages.

land-based wind components, the First Updated Elective Safe Harbor's values (Updated Assigned Cost Percentages for Land-Based Wind) are the same values as the Assigned Cost Percentages for the Land-Based Wind Table in Table 1. This notice uses the same values because DOE, using analysis from the national laboratories, found only minor changes in the component cost data underlying the Assigned Cost Percentages for the Land-Based Wind Table in Table 1. For this reason, DOE did not independently publish updates to this data.

Third, section 7 of this notice provides several modifications to Notice 2024-41, including providing updated assigned cost percentages for the Manufactured Products and Manufactured Product Components relating to the Battery Electric Storage System (BESS) (Updated Assigned Cost Percentages for BESS), which Table 1 provided as the Assigned Cost Percentages for the (3) Battery Electric Storage System (BESS). Like the Assigned Cost Percentages, the Updated Assigned Cost Percentages apply to both grid-scale BESS and distributed BESS Applicable Projects.

Fourth, section 4 of the First Updated Elective Safe Harbor provides that a taxpayer with a qualified facility under § 45 or energy project under § 48 that is placed in service after December 31, 2022, and that meets the 80/20 Rule, or a qualified facility under §§ 45Y or 48E or energy storage technology under § 48E that is placed in service after December 31, 2024, and that meets the 80/20 Rule, may use the classifications and cost percentages in Table 1 or the First Updated Elective Safe Harbor (as applicable) to qualify for the domestic content bonus credit amount.

Fifth, the First Updated Elective Safe Harbor provides updated definitions for representative types of Applicable Projects and definitions for certain Applicable Project Components and Manufactured Product Components.

SECTION 4. CLARIFICATION ON APPLICATION OF TABLES

A taxpayer may elect to use the classifications and cost percentages in Table 1 of Notice 2024-41 or the First Updated Elective Safe Harbor (as applicable) to qualify for the domestic content bonus credit amount for Applicable Projects of the specific types identified in Table 1 or the First Updated Elective Safe Harbor that are eligible for a credit under sections 45, 45Y, 48, or 48E by virtue of the 80/20 Rule. For example, as provided for in Notice 2023-38, an Applicable Project that is eligible for a credit under sections 45, 45Y, 48, or 48E by virtue of the 80/20 Rule is eligible for a domestic content bonus credit amount if the new property in the Applicable Project meets the Domestic Content Requirement and the taxpayer complies with the requirements described in the notice. To determine the Domestic Cost Percentage for such an Applicable Project, the taxpayer may use the classifications and cost percentages in Table 1 or the First Updated Elective Safe Harbor (as applicable). Only new U.S. Manufactured Products and U.S. Components of the Applicable Project that are listed in Table 1 of Notice 2024-41 or of this First Updated Elective Safe Harbor (as applicable) would be considered in the calculation of the Domestic Cost Percentage (with no changes to those tables' percentages). All other Manufactured Products or Manufactured Product Components, including the used property in an Applicable Project that qualifies as originally placed in service by virtue of the 80/20 Rule, will be treated as foreign-sourced Manufactured Products or Manufactured Product Components solely for purposes of calculating the Domestic Cost Percentage when applying the New Elective Safe Harbor in Notice 2024-

41, and for applying the First Updated Elective Safe Harbor in this notice, and must take a zero value consistent with section 4.03(3) in Notice 2024-41 and section 8.03(3) of this notice. In such cases, new property may be considered in the calculation of the Domestic Content Percentage if it meets the definition of a U.S. Manufactured Product (as defined in section 3.03(1) of Notice 2023-38, including being produced in the United States), or a U.S. Component (as defined in section 3.03(2)(b) in Notice 2023-38, including being mined, produced, or manufactured in the United States). Furthermore, to meet the Domestic Content Requirement, such Applicable Projects must also satisfy the Steel or Iron Requirement with respect to only new Applicable Project Components that are specified as subject to the Steel or Iron Requirement in Table 1 of Notice 2024-41 or this First Updated Elective Safe Harbor (as applicable).

The modification to Notice 2024-41 described in this section does not extend a taxpayer's ability to rely on Notice 2024-41, as described in section 11 of this notice.

SECTION 5. MODIFICATIONS TO TABLE 1 FOR SOLAR PV; GROUND-MOUNT AND ROOFTOP

.01 Modifications to Table 1 for Solar PV; Expanded Tables. The First Updated Elective Safe Harbor modifies Table 1 for Solar PV in section 4.04(1) of Notice 2024-41 by expanding it into two distinct tables to provide the Updated Assigned Cost Percentages for PV Solar for both types of ground-mount photovoltaic systems and both types of rooftop photovoltaic systems. See tables in sections 5.05 and 5.06 of this notice. DOE calculated the Updated Assigned Cost Percentages for PV Solar using its new ground-mount and rooftop PV component costs for 2024, which DOE derived from cost data from a variety of sources, including datasets of system characteristics, price indices, U.S. survey data from the government (for example, the

U.S. Bureau of Labor Statistics, Department of Labor) and private sector, public filings from corporations, and comprehensive interviews of manufacturers, installers, developers, and owners of the representative technologies. In addition, DOE used data collected from three different national laboratories to generate the Updated Assigned Cost Percentages for PV Solar, rather than a single national laboratory survey that DOE relied upon for the methodology used to generate the Assigned Cost Percentages in Table 1.

.02 Addition of New Columns. The First Updated Elective Safe Harbor further modifies Table 1 for Solar PV in section 4.04(1) of Notice 2024-41 by adding a new column with a second set of Updated Assigned Cost Percentages for each type of ground-mount PV system and each type of rooftop PV system. This alternative set of Updated Assigned Cost Percentages can be used if a PV system has PV modules that incorporate c-Si PV cells and wafers manufactured within the United States. These additional Updated Assigned Cost Percentages were incorporated to reflect the significant cost premium this type of cell would carry relative to other types of domestic cells, such as those with foreign wafers or domestic thin-film cells. These new columns include values based on DOE's estimates of underlying direct costs for a domestically produced module containing c-Si PV cells made from domestically produced c-Si wafers. The Updated Assigned Cost Percentages for PV Solar are from DOE's Quarterly Solar Industry Update (publication pending), which are derived from a DOE-led effort that uses data collected from national laboratories.

The Treasury Department and the IRS, in consultation with DOE, implemented the updates described after review of the comments received in response to the

request for comments made in Notice 2024-41, which highlighted the expected cost premium incurred from procuring domestically produced c-Si PV cells made with domestically produced silicon wafers. Based on this review and consultation with DOE, the Treasury Department and the IRS concluded that, due to the expected cost premium associated with domestically produced silicon wafers, Table 1 could misrepresent the expected costs of domestically produced c-Si PV cells made with these wafers, thereby reducing Table 1's accuracy. This inaccuracy could risk under-crediting a component whose value is, to a significant extent, created domestically, while over-crediting other components within the table.

Given these considerations, the Treasury Department and the IRS, in consultation with DOE, have determined that it is appropriate to provide taxpayers the option of using a cost safe harbor that more specifically reflects the cost of c-Si PV cells produced with domestically produced wafers.

.03 Renaming of Certain Components. The First Updated Elective Safe Harbor further modifies Table 1 for Solar PV in section 4.04(1) of Notice 2024-41 by renaming the following Applicable Project Components and Manufactured Product Components. With respect Applicable Project Components: (i) "Pile or ground screw" is renamed "Steel pile or steel ground screw" for consistency with the description of other items categorized as a steel/iron product, and (ii) "Steel or iron rebar in foundation" is renamed "Steel or iron reinforcing products in foundation" to better reflect its function and to clarify that non-rebar steel or iron reinforcement is also covered.

With respect to Manufactured Product Components: (i) "Climate Control" is renamed "Thermal Management System"; (ii) "Enclosure" is renamed "Enclosure &

Skids" for the Inverter Applicable Project Component of both types of ground-mount photovoltaic systems; (iii) "Fasteners" is renamed "Structural Fasteners"; (iv) "Slew Drive" is renamed "Drive System"; and (v) "Motor" is renamed "Actuator" to better reflect each Manufactured Product Component's function by providing specificity.

.04 Redefining, Recategorizing, and Reclassifying Certain Components. The following changes were made after consultation with DOE and review of stakeholder feedback: First, the First Updated Elective Safe Harbor revises the definition of: (i) "Ground-mounted PV (fixed-tilt)" to clarify that it includes canopy steel racking structures and structures floating on a body of water; (ii) "Ground-mounted PV (tracker)" to clarify that it includes structures floating on a body of water; and (iii) "Rooftop PV (MLPE)" to clarify that it refers to a system where the microinverters or DC-optimizers regulate the DC electricity from each of its solar PV modules independently before the electricity is converted into alternating current electricity.

Second, the First Updated Elective Safe Harbor clarifies that the Manufactured Product Component "Electrical Parts" for ground-mount PV systems includes the following components that are not on printed circuit board (PCB) assemblies: control transformers, capacitors, inductors, bus/cables, circuit protection.

Third, as provided in the table in section 5.06 of this notice, the First Updated Elective Safe Harbor removes "Electrical Parts for rooftop PV systems," and adds their costs to "Printed Circuit Board Assemblies" (DC-DC) and "Printed Circuit Board Assemblies" (DC-AC).[4]

[4] The abbreviated terms "DC" and "AC" are generally industry accepted terms meaning "Direct Current" and "Alternating Current," respectively.

Fourth, for “Solar PV Rooftop”, the First Updated Elective Safe Harbor categorizes DC-to-DC and DC-to-AC “Printed Circuit Board Assemblies” as separate Manufactured Products Components, and the domestic “Printed Circuit Board Assemblies” that perform both functions (that is, convert both DC to DC and DC to AC) can get credit for each cost percentage.[5]

Fifth, "Adhesives,” which is listed as a Manufactured Product Component for PV Solar in Table 1, is removed from the First Updated Elective Safe Harbor to avoid redundancy and confusion because “Pottants” and “Edge Seals,” which are listed as Manufactured Product Components within the First Updated Elected Safe Harbor, are also adhesives. As such, to reflect the removal of “Adhesives” within the Updated Assigned Cost Percentages for PV Solar, the Treasury Department and the IRS, in consultation with DOE, increased the associated cost percentage for both “Pottants” and “Edge Seals”. See tables in section 5.05 and 5.06 of this notice.

.05 Updated Table for Solar PV Ground-Mount

APC	**MPC**	**Ground-mount (Tracking)**	**Ground-mount (Tracking) with Domestic c-Si PV Cells & Domestic Wafers**	**Ground-mount (Fixed)**	**Ground-mount (Fixed) with Domestic c-Si PV Cells & Domestic Wafers**
PV module	Cells	38.0	51.6	53.2	66.6
	Frame/Backrail	6.0	4.7	8.5	6.1
	Front Glass	6.0	4.7	8.4	6.1
	Encapsulant	3.8	3.0	5.4	3.8
	Backsheet/Backglass	3.8	3.0	5.4	3.8

[5] Larger inverters, such as those in most ground-mount applications, have fundamentally different architectures than smaller inverters. As such, DOE assessed that a similar change would not improve the accuracy of the cost percentages for ground-mount PV systems.

	Junction Box	1.0	0.8	1.4	1.0
	Edge Seals	0.3	0.2	0.4	0.3
	Pottants	0.3	0.2	0.4	0.3
	Bus Ribbons	1.5	1.2	2.1	1.5
	Bypass Diodes	0.4	0.3	0.6	0.4
	Production[6]	**4.7[7]**	**3.7[7]**	**6.7[7]**	**4.8[7]**
Inverter	Printed Circuit Board Assemblies	2.4	1.7	3.1	2.2
	Electrical Parts	0.8	0.6	1.1	0.8
	Thermal Management System	0.5	0.4	0.7	0.5
	Enclosure & Skids	0.6	0.5	0.9	0.6
	Production	**1.2[7]**	**0.9[7]**	**1.7[7]**	**1.2[7]**
PV Tracker	Torque tube	11.0	8.6	-	-
	Structural Fasteners	0.4	0.3	-	-
	Drive System	1.9	1.5	-	-
	Dampers	0.5	0.4	-	-
	Actuator	2.8	2.2	-	-
	Controller	0.7	0.6	-	-
	Rails	2.0	1.6	-	-
	Production	**9.4[7]**	**7.3[7]**	-	-
Steel photovoltaic module racking	-	-	-	Steel/Iron Product	Steel/Iron Product
Steel pile or Steel ground screw	-	Steel/Iron Product	Steel/Iron Product	Steel/Iron Product	Steel/Iron Product
Steel or Iron reinforcing products in foundation	-	Steel/Iron Product	Steel/Iron Product	Steel/Iron Product	Steel/Iron Product
Total	-	**100**	**100**	**100**	**100**

.06 Updated Table for Solar PV Rooftop

[6] Although "Production" is listed under the column for Manufactured Product Components (MPCs), it is not an MPC. "Production" refers to the production cost of the relevant Applicable Project Component (APC) that is a Manufactured Product and can only be included in the Domestic Cost Percentage if all of the Manufactured Product Components of that Manufactured Product APC are domestically produced. See section 3.03(2) of Notice 2023-38.

[7] Consistent with Notice 2023-38, the direct cost of producing a Manufactured Product counts toward the Domestic Cost Percentage only if all its Manufactured Product Components are domestically produced.

APC	MPC	Rooftop (MLPE)	Rooftop (MLPE) with Domestic c-Si PV cells & Domestic Wafers	Rooftop (String)	Rooftop (String) with Domestic c-Si PV cells & Domestic Wafers
PV module	Cells	31.1	43.9	38.5	52.1
	Frame/Backrail	4.9	4.0	6.1	4.8
	Front Glass	4.9	4.0	6.1	4.7
	Encapsulant	3.1	2.5	3.9	3.0
	Backsheet/Backglass	3.1	2.5	3.9	3.0
	Junction Box	0.8	0.6	1.0	0.8
	Edge Seals	0.2	0.2	0.3	0.2
	Pottants	0.2	0.2	0.3	0.2
	Bus Ribbons	1.2	1.0	1.5	1.2
	Bypass Diodes	0.3	0.3	0.4	0.3
	Production	**5.8**[8]	**4.7**[8]	**7.2**[8]	**5.6**[8]
Inverter[9]	Printed Circuit Board Assemblies (DC-DC)[10]	7.8	6.4	1.6	1.3
	Printed Circuit Board Assemblies (DC-AC)[10]	11.8	9.5	2.4	1.9
	Thermal Management System	-	-	0.5	0.4
	Enclosure	4.3	3.5	1.3	1.0
	Production	**0.9**[8]	**0.7**[8]	**0.5**[8]	**0.4**[8]
Non-Steel Roof Racking	Structural Fasteners	3.5	2.9	4.4	3.4
	Rails	15.0	12.2	18.7	14.6
	Production	**1.1**[8]	**0.9**[8]	**1.4**[8]	**1.1**[8]
Total	-	**100**	**100**	**100**	**100**

.07 Definitions.

(1) *Actuator. Actuator* means the component that produces the force, torque, and displacement.

[8] Consistent with Notice 2023-38, the direct cost of producing a Manufactured Product counts toward the Domestic Cost Percentage only if all its Manufactured Product Components are domestically produced.
[9] For purposes of this table, module-level power electronics inverter systems, including either microinverters or direct current (DC) optimizers, are considered an inverter product.
[10] In instances in which a U.S. Component meets the criteria of more than one listed manufactured product component, it can claim all relevant Updated Assigned Cost Percentages.

(2) *Backrail*. *Backrail* means the component that secures the module laminate to its support structure. A *Backrail* can be used for the same purposes and in place of a *Frame*.

(3) *Backsheet/Backglass*. *Backsheet/Backglass* means the sheet or piece of glass on the back of solar modules that acts as an electric insulator and protects the inner components of such module from the surrounding environment.

(4) *Cells. Cells* in a PV module means the smallest semiconductor element of a solar module which performs the immediate conversion of light into electricity.

(5) *Controller. Controller* means the component that transmits operating instructions to the actuator.

(6) *Crystalline silicon cells. Crystalline silicon cells,* also referred to as c-Si cells, means a cell in a PV module, as defined in section 5.05(4) of this notice, that is made of silicon atoms connected to form a lattice.

(7) *Drive system. Drive system* means the components that transmit force, torque, or displacement from the actuator to the torque tube.

(8) *Electrical parts. Electrical parts* mean the components consisting of only control transformers, capacitors, inductors, bus/cables, and circuit protection not on printed circuit board (PCB) assemblies.

(9) *Encapsulant. Encapsulant* means the material used to adhere the cell strings between the front and rear glass (or backsheet) for the purpose of protecting against environmental stress.

(10) *Enclosure: Enclosure* means the protective structure that houses, that is, encloses, the other inverter components.

(11) *Frame. Frame* means the component that secures the module laminate to its support structure.

(12) *Front glass*: *Front glass* means the transparent, protective, structural front layer of a PV module.

(13) *Ground-mounted PV (fixed-tilt)*. *Ground-mount PV (fixed-tilt)* refers to an energy system using photovoltaic solar modules to generate electricity, mounted to a non-building structure, including canopy steel racking structures, or floating on a body of water, where the PV modules are mounted at a fixed angle and orientation.

(14) *Ground-mounted PV (tracker)*. *Ground-mount PV (tracker)* refers to an energy system using photovoltaic solar modules to generate electricity, mounted to a non-building structure, or floating on a body of water, which integrates a solar tracker to rotate the solar modules.

(15) *Junction box*. *Junction box* means the component that connects PV cell strings and keeps power flowing in one direction.

(16) *Printed circuit board assemblies. Printed circuit board assemblies* means finished, fully functional printed circuit boards that have all necessary subcomponents soldered and installed on to them.

(17) *Rails. Rails,* including the components known as purlins, means the components that attach modules to torque tubes.

(18) *Rooftop PV (MLPE)*. *Rooftop PV (MLPE)* refers to an energy system using photovoltaic solar modules to generate electricity, mounted to a building structure, which integrates one or more microinverters or uses a DC-optimized inverter system such that the rooftop PV system (with its microinverter(s) or DC-optimized inverter system)

regulates the DC electricity from each of its modules independently before that electricity is converted into alternating current electricity.

(19) *Rooftop PV (string inverter)*. *Rooftop PV (string inverter)* refers to an energy system using photovoltaic solar modules to generate electricity, mounted to a building structure, which integrates one or more inverters to convert direct current electricity from a string of solar panels into alternating current electricity.

(20) *Skid. Skid* means that component upon which the enclosure sits.

(21) *Structural Fasteners. Structural Fasteners* for use in ground-mount PV applications means a component that is used to connect the mechanical and drive system components of a solar tracker to the foundation of the solar tracker, to connect torque tubes to drive assemblies, or to connect segments of torque tubes to one another. *Structural Fasteners* for use in rooftop PV applications means a component that connects the rails, modules, and MLPE (if applicable) to one another.

(22) *Thermal management system. Thermal management system* means the system consisting of the heat sinks, heat pipes, fans and/or the liquid cooling systems.

(23) *Torque tubes.* For purposes of the Manufactured Product Components provided within the table under section 5.05 of this notice, *Torque tubes* means a structural support element, including longitudinal purlins that: (i) is part of a solar tracker; (ii) is of any cross-sectional shape; (iii) may be assembled from individually manufactured segments; (iv) spans longitudinally between foundation posts; (v) supports solar panels and is connected to a mounting attachment for solar panels (with or without separate module interface rails); (vi) and is rotated by means of a drive system.

(24) *Wafer*. *Wafer* means a thin slice, sheet or layer of crystalline silicon semiconductor material that comprises the substrate or absorber layer of one or more photovoltaic cells. It is manufactured by forming an ingot from molten polysilicon and then slicing it into wafers, or by depositing a thin-film semiconductor photon absorber into a sheet or layer, that is, a thin-film deposition.

SECTION 6. MODIFICATIONS TO TABLE 1 FOR LAND-BASED WIND

.01 Modifications to Table 1 for Land-Based Wind. The First Updated Elective Safe Harbor modifies Table 1 for Land-based Wind of section 4.04(2) of Notice 2024-41 by renaming "Steel or iron rebar in foundation," the Applicable Project Component for wind turbine foundation steel, to "Steel or iron reinforcing products in foundation," and further renaming "Material," the Manufactured Product Component for wind tower flanges, to "Preform." This first modification is made to better reflect the Applicable Project Component's function and to clarify that non-rebar steel or iron reinforcement is also covered. The second modification is made to better reflect the manufacturing process and supply chain.

.02 Updated Table for Land-Based Wind.

APC	MPC	Value
Wind Turbine	Blades	31.2
	Rotor Hub	9.9
	Nacelle	47.5
	Power Converter	8.9
	Production	**0.9**[11]
Wind Tower Flanges	Preform[12]	0.8
	Production	**0.8**[11]

[11] Consistent with Notice 2023-38, the direct cost of producing a Manufactured Product counts toward the Domestic Cost Percentage only if all its Manufactured Product Components are domestically produced.
[12] Flanges are typically made from single pieces of steel bar or pre-formed steel ingot; therefore the only component of a flange would be the preform.

Tower	-	Steel/Iron Product
Steel or iron reinforcing products in foundation	-	Steel/Iron Product
Total	-	100

.03 Definitions.

(1) *Blades*. *Blades* means the airfoil-shaped blade that is responsible for converting wind energy to low-speed rotational energy.

(2) *Land-based wind*. *Land-based* wind means an energy system using wind turbines to generate electricity on land.

(3) *Nacelle*. *Nacelle* means the assembly of the drivetrain and other tower-top parts of a wind turbine (with the exception of the blades, rotor hub, and power converter, if located atop the tower) within their cover housing.

(4) *Power converter*. *Power converter* means the component that translates the electrical energy generated by the generator within the nacelle into a frequency and voltage compatible with use or export to the grid.

(5) *Preform*. *Preform* means the rough-formed forged metal component from which a wind tower flange is rolled and machined.

(6) *Rotor hub*. *Rotor hub* means the component to which the blades of a wind turbine are attached, which controls the pitch angle of the blades with respect to the wind and is connected to and transfers its rotation to the drivetrain within the nacelle.

SECTION 7. MODIFICATIONS TO TABLE 1 FOR BATTERY ENERGY STORAGE SYSTEMS

.01 Modifications to Table 1 for Battery Energy Storage Systems (BESS).

The First Updated Elective Safe Harbor modifies Table 1 for BESS in section 4.04(3) of Notice 2024-41 by providing the Updated Assigned Cost Percentages for BESS, which DOE sourced from its new BESS component costs for 2024. DOE derived the Updated Assigned Cost Percentages for BESS from cost data from a variety of sources, including datasets of system characteristics, price indices, U.S. survey data from the government (for example, the U.S. Bureau of Labor Statistics, Department of Labor) and private sector, public filings from corporations, and comprehensive interviews of manufacturers, installers, developers, and owners of the representative technologies. In addition, DOE used data collected from three different national laboratories to generate the Updated Assigned Cost Percentages for BESS, rather than a single national laboratory survey that DOE relied upon for the methodology it used to generate the Assigned Cost Percentages in Table 1. The Updated Assigned Cost Percentages for BESS more closely reflect the direct cost methodology outlined in Notice 2023-38.

The First Updated Elective Safe Harbor further modifies the BESS table from Table 1 by: (i) renaming the following Applicable Project Components: (1) “Battery Pack” to “Battery Pack/Module,” (2) “Inverter” to “Inverter/Converter,” and (3) “Steel or iron rebar in foundation” to “Steel or iron reinforcing product foundation”; (ii) renaming the Manufactured Product Components “Enclosure,” within the Inverter/Converter row, to “Enclosure & Skids,” and “Climate Control,” within the Inverter/Converter row, to “Thermal Management System for Inverter”; (iii) recategorizing the following Manufactured Product Components: (1) “Thermal Management System” and “Battery Management System” are recategorized from the Applicable Project Component row of

"Battery Pack," in Table 1, to the Applicable Project Component row of "Battery Container/Housing", and (2) "Battery Racks" and "Metal Enclosures" are recategorized as "Enclosures" within the Applicable Project Component row of "Battery Container/Housing"; and (iv) removing the cost values for "Electrical Parts and Thermal Management System for Inverter" (within the Inverter/Converter Applicable Project Component) from the Distributed BESS column and adding them to the Printed Circuit Board Assemblies within the same column.

The modifications described above are made for purposes of the First Updated Elective Safe Harbor to better represent the variety of the Manufactured Product Components that are used for particular functions within Applicable Project Components. Additionally, "Steel or iron reinforcing product foundation" is renamed to better reflect its function, and to clarify that non-rebar steel and iron reinforcement are also covered.

With respect to the Thermal Management Systems and Battery Management Systems referenced above, the DOE has advised that most of these systems are located in the container outside of the battery pack/module. For this reason, and because DOE's published cost analysis is based on extensive industry feedback, updating the placement of these items within the tables provided in this notice more accurately represents the Manufactured Product Components for Battery Packs/Modules and for Battery Container/Housing. Updating the placement of these items is also more consistent with the cost breakdown within DOE's cost analysis. As such, the reclassification further improves the accuracy of the associated cost percentages provided in this notice.

.02 Updated Table for Battery Energy Storage System (BESS).

APC	MPC	Grid-scale BESS	Distributed BESS
Battery Pack/ Module	Cells	52.0	26.9
	Packaging	5.6	13.4
	Production	**8.0**[13]	**2.9**[13]
Inverter/ Converter	Printed Circuit Board Assemblies	1.4	5.4
	Thermal Management System for Inverter	0.4	-
	Electrical Parts	0.5	-
	Enclosure & Skids	0.4	1.0
	Production	**1.9**[13]	**4.3**[13]
Battery Container/ Housing	Enclosure	14.8	22.8
	Battery Management System	7.4	10.1
	Thermal Management System for Battery Container/Housing	5.6	10.1
	Production	**2.0**[13]	**3.1**[13]
Steel or iron reinforcing products in foundation	-	Steel/Iron Product	-
Total	-	**100**	**100**

.03 Definitions.

(1) *Battery pack/module*. *Battery pack/module* means the packaged unit of battery cells that are configured electrically, in series or parallel, and is ready for installation in the battery container/housing without an additional manufacturing process.

[13] Consistent with Notice 2023-38, the direct cost of producing a Manufactured Product counts toward the Domestic Cost Percentage only if all its Manufactured Product Components are domestically produced.

(2) *Inverter/converter*. *Inverter/converter* means an end product that is suitable to convert between direct current and alternating current or direct current and direct current electricity to enable battery charge and discharge.

(3) *Battery container/housing*. *Battery container/housing* means a superstructure that houses, protects, and manages a system of multiple battery packs/modules.

(4) *Battery Management System*. *Battery Management System* means a combined system of electrical and electronic parts that serves to monitor (and may also control) the condition of the battery pack/module.

(5) *Cells. Cells* in a battery pack means an electrochemical cell comprised of one or more positive electrodes and one or more negative electrodes.

(6) *Distributed BESS*. *Distributed BESS* means an energy storage system for electricity generation using battery cells and battery modules, which has a nameplate capacity not greater than 1 megawatt-hour.

(7) *Electrical parts*. *Electrical parts* mean the components consisting of only control transformers, capacitors, inductors, bus/cables, and circuit protection not on printed circuit board (PCB) assemblies.

(8) *Enclosure*. *Enclosure* means a structure that houses and protects other equipment and may provide structural support to other products and components.

(9) *Grid-scale BESS*. *Grid-scale BESS* means an energy storage system for electricity generation using battery cells and battery modules, which has a nameplate capacity greater than 1 megawatt-hour.

(10) *Packaging. Packaging* means the materials that surround battery cells to create a battery pack/module.

(11) *Printed circuit board assemblies*. *Printed circuit board assemblies* means finished, fully functional printed circuit boards that have all necessary subcomponents soldered and installed on to them.

(12) *Thermal Management System for Inverter. Thermal management System for Inverter* means the primary cooling unit to optimize operation and safety, external to and/or within the Inverter/Converter (in which it is a Manufactured Product Component of the Inverter/Converter).

(13) *Thermal Management System for Battery Container/Housing*. *Thermal Management System for Battery Container/Housing* means the primary cooling unit to optimize operation and safety of the BESS (in which it is a Manufactured Product Component of the Battery Container/Housing).

SECTION 8. CONDITIONS FOR USE OF THE FIRST UPDATED ELECTIVE SAFE HARBOR

.01 In General. The First Updated Elective Safe Harbor applies to both the Steel or Iron Requirement and the Manufactured Products Requirement of the Domestic Content Requirement for each Applicable Project for which a taxpayer elects to have the First Updated Elective Safe Harbor apply. Notice 2023-38 requires that costs that are included in the numerator and denominator for purposes of calculating the Domestic Cost Percentage are the direct materials and direct labor costs that are paid or incurred by the manufacturer of the Manufactured Product. Taxpayers are further required to calculate the direct costs of any U.S. Components that may have been incorporated into Non-U.S. Manufactured Products. The Treasury Department and the IRS are aware that obtaining a manufacturer's direct costs of manufacturing may require the taxpayer

to gather cost data from multiple suppliers and manufacturers, including foreign manufacturers, and may present challenges for substantiation and verification.

.02 First Updated Elective Safe Harbor. Unless otherwise provided in this notice, a taxpayer electing to use the First Updated Elective Safe Harbor for an Applicable Project must use the Applicable Project Components, the Manufactured Product Components, and the Updated Assigned Cost Percentages listed in a table provided in sections 5-7 of this notice as the exclusive and exhaustive set of Applicable Project Components, Manufactured Product Components and Updated Assigned Cost Percentages for purposes of determining compliance with the Domestic Content Requirement for each Applicable Project for which the taxpayer makes this election. The requirements in the previous sentence apply regardless of whether property listed in a table provided in sections 5-7 of this notice is fully or fractionally owned or shared. The classifications and cost percentages provided in a tables provided in sections 5-7 of this notice will be accepted by the IRS for the identified Manufactured Products and Manufactured Product Components for purposes of determining compliance with the Steel or Iron Requirement and calculating the Domestic Cost Percentage if all other requirements in this notice and Notice 2023-38 are met.

To be eligible for the First Updated Elective Safe Harbor, Applicable Projects are not required to be made of all the Applicable Project Components provided in a table provided in sections 5-7 of this notice, and each Applicable Project Component listed is not required to be made of the full list of Manufactured Product Components provided in a table provided in sections 5-7 of this notice. Taxpayers may still elect to use the First Updated Elective Safe Harbor even if entries in a table of this notice are not used as

inputs to their Applicable Projects or Manufactured Products, or if the Applicable Project contains additional inputs not listed in a table provided in sections 5-7 of this notice.

Any Applicable Project Component or Manufactured Product Component listed in a table provided in sections 5-7 of this notice that is not used as an input to the Applicable Project must be treated by the electing taxpayer as having a zero value in calculating the Domestic Cost Percentage. An Applicable Project Component or Manufactured Product Component contained in a taxpayer's Applicable Project but not listed in a table provided in sections 5-7 of this notice will not disqualify the taxpayer from using the First Updated Elective Safe Harbor. However, such unlisted items may not count toward satisfying the Adjusted Percentage Rule. The absence of a Manufactured Product or Manufactured Product Component that is listed in a table provided in sections 5-7 of this notice, or the presence of a Manufactured Product or Manufactured Product Component that is not listed in sections a table provided in 5-7 of this notice, in an Applicable Project does not affect the Assigned Cost Percentages listed in sections 5-7 for purposes of the First Updated Elective Safe Harbor.

.03 First Updated Elective Safe Harbor Requirements.

(1) In general. Unless otherwise provided, all other provisions of Notice 2023-38 apply in determining whether an Applicable Project meets the Domestic Content Requirement. For example, the Applicable Project Components that are specified as subject to the Steel or Iron Requirement in sections 5-7 of this notice must satisfy the Steel or Iron Requirement described in section 3.02 of Notice 2023-38. See sections 8.03(8) and 10 of this notice for the First Updated Elective Safe Harbor's election and certification requirements.

(2) No Partial Safe Harbor Reliance. Taxpayers that elect to use the First Updated Elective Safe Harbor must apply in its entirety the section of this notice that is specific to the Applicable Project for which the taxpayer makes such election. For example, if a taxpayer's Applicable Project is a land-based wind facility, the taxpayer must use the classifications for Applicable Project Components and Manufactured Product Components in section 6.02 of this notice with respect to land-based wind and must use the Updated Assigned Cost Percentages for all the Manufactured Products and Manufactured Product Components (for example, Blades, Rotor Hub, Nacelle, and Power Converter) provided in section 6.02 of this notice that are used in the taxpayer's Applicable Project without substitution.

(3) Determining Domestic Cost Percentage. To determine the Domestic Cost Percentage using the First Updated Elective Safe Harbor, a taxpayer must refer to the section of this notice that describes the taxpayer's Applicable Project and add up the Updated Assigned Cost Percentages for each listed U.S. Manufactured Product (as defined in section 3.03(1) of Notice 2023-38) and U.S. Component (as described in section 3.03(2)(b) of Notice 2023-38) of the taxpayer's Applicable Project. This total value is the Domestic Cost Percentage for purposes of the First Updated Elective Safe Harbor. Any Manufactured Product or Manufactured Product Component listed in a table provided in sections 5-7 of this notice that is not a part of the taxpayer's Applicable Project must take a zero value for the Updated Assigned Cost Percentage under the First Updated Elective Safe Harbor for such Manufactured Product or Manufactured Product Component, with all Updated Assigned Cost Percentages shown in sections 5-7 of this notice remaining unchanged. Any Manufactured Product or Manufactured

Product Component not listed in a table provided in sections 5-7 of this notice must be disregarded for purposes of determining the Domestic Cost Percentage using the First Updated Elective Safe Harbor.

(4) Solar PV systems with Domestic C-Si PV Cells and Domestic Wafers. Taxpayers with ground-mount (tracking), ground-mount (fixed), rooftop (MLPE), or rooftop (string) solar PV systems may elect to use the associated cost percentages for ground-mount (tracking) with domestic c-Si PV cells and domestic wafers, ground-mount (fixed) with domestic c-Si PV cells and domestic wafers, rooftop (MLPE) with domestic c-Si PV cells and domestic wafers, or rooftop (string) with domestic c-Si PV cells and domestic wafers if all, or a portion of, the PV modules in the Applicable Project use domestically manufactured c-Si PV cells that exclusively use domestically manufactured wafers, as the terms are defined in section 5.07 of this notice and subject to the guidance in section 8.03(5) of this notice below.

(5) Foreign- and Domestic-Sourced Manufactured Products and/or Manufactured Product Components. Taxpayers who source the same type of Manufactured Product or Manufactured Product Component (that is, they are listed in the same row of a particular table in sections 5-7 of this notice) from both foreign and domestic sources (Mixed Source Item or MSI) in a particular Applicable Project described in sections 5-7 of this notice may use the First Updated Elective Safe Harbor to determine a single Updated Assigned Cost Percentage for each separate type of Mixed Source Item in the Applicable Project.

Taxpayers that elect to use the associated cost percentages for solar PV with domestic c-Si PV cells and domestic wafers where only a portion of the Applicable

Project's PV cells are domestic c-Si PV cells that exclusively use domestically manufactured wafers must treat any domestically manufactured PV cells that do not exclusively use domestic wafers as though such PV cells are foreign sourced for purposes of using the cost percentages in this notice, and may not include the "Production" cost percentage for PV modules containing such cells that otherwise meet the definition of a U.S. Manufactured Product in section 3.03(2) of Notice 2023-38. Furthermore, taxpayers that elect to use the associated cost percentages for ground-mount (tracking) with domestic c-Si PV cells and domestic wafers, ground-mount (fixed) with domestic c-Si PV cells and domestic wafers, rooftop (MLPE) with domestic c-Si PV cells and domestic wafers, or rooftop (string) with domestic c-Si PV cells and domestic wafers must use the corresponding Updated Assigned Cost Percentages for all the Manufactured Products and Manufactured Product Components in the Applicable Project for purposes of determining the Domestic Cost Percentage.

For Mixed Source Items (MSI), that have a nameplate capacity, the following weighted average formula may be used to determine the Updated Assigned Cost Percentage attributable to each type of Mixed Source Item:

$$\frac{DCP_{\text{Domestic MSI}} \times \text{Nameplate Capacity}_{\text{Domestic MSI}}}{\text{Nameplate Capacity}_{\text{MSI}}}$$

For purposes of this formula:

(a) $DCP_{\text{Domestic MSI}}$ means the Updated Assigned Cost Percentage derived from the tables in this notice of the Mixed Source Item.

(b) Nameplate Capacity$_{DomesticMSI}$ means the nameplate capacity of the Mixed Source Items of the same type in the Applicable Project that is produced in the United States.

(c) Nameplate Capacity$_{MSI}$ means the total nameplate capacity of the Mixed Source Items of the same type in the Applicable Project.

For Mixed Source Items without nameplate capacities, the portion of cost percentage provided in sections 5-7 of this notice that may count toward the Domestic Cost Percentage must be calculated by using the weighted average formula described above, modified by replacing the nameplate capacity of the Mixed Source Items with the nameplate capacities of the associated Applicable Project Components with which the Mixed Source Item is directly integrated. For this purpose, Mixed Source Items without nameplate capacities must apply: the total nameplate capacity of the associated PV module(s) for the Solar PV Table; the total nameplate capacity of the associated wind turbine for land-based wind; or the total nameplate capacity of the battery pack(s) for BESS. If a type of Mixed Source Item without nameplate capacity has multiple units that are both foreign- and domestic-sourced associated and directly integrated with the same Applicable Project Component with nameplate capacity, then all such Mixed Source Items must be treated as foreign-sourced.

(6) Production Costs. The tables in sections 5-7 of this notice contain a line item for “Production,” which, although listed under the column for Manufactured Product Components, is not a Manufactured Product Component. With the exception noted in section 8.03(5) of this notice, above, “Production” refers to the production cost of the relevant Manufactured Product and can be included in the total Domestic Cost

Percentage only if all the Manufactured Product Components of a Manufactured Product are domestically produced. See Notice 2023-38, section 3.03(2). The Updated Assigned Cost Percentage attributable to production costs for a particular Manufactured Product may be used if such Manufactured Product contains Manufactured Product Components not listed in a table provided in sections 5-7 of this notice or if entries in a table provided in sections 5-7 of this notice are not a part of such Manufactured Product, so long as the remainder of the Manufactured Product Components in sections 5-7 that are a part of such Manufactured Product are mined, produced, or manufactured in the United States.

(7) Exclusive Safe Harbor. A taxpayer that elects to use the First Updated Elective Safe Harbor with respect to an Applicable Project must consider the steel or iron products, Manufactured Products, and Manufactured Product Components that are identified in a table provided in sections 5-7 of this notice as an exclusive and exhaustive set of steel or iron products, Manufactured Products, and Manufactured Product Components for purposes of determining compliance with the Domestic Content Requirement for that Applicable Project. The First Updated Elective Safe Harbor may still be used in instances in which a taxpayer's Applicable Project does not contain every item identified in a table in sections 5-7 of this notice, or in which a taxpayer's Applicable Project contains additional items not identified in a table provided in sections 5-7 of this notice, provided the taxpayer applies the requirements for determining Domestic Cost Percentage described in section 8.03(3)-(7) of this notice.

(8) Certification. Taxpayers must affirmatively elect to rely on the First Updated Elective Safe Harbor in sections 5-7 of this notice and must notify the IRS of this

election by providing information on the Domestic Content Certification Statement as described in section 10 of this notice.

.04 Examples

(1) Example 1.

(a) In its taxable year beginning in June 2025, Taxpayer purchases a 100-megawatt direct current (MWdc) ground-mounted PV (tracker) (Applicable Project A) from Contractor under an EPC contract, places the project in service, and makes a valid election to use the First Updated Elective Safe Harbor to qualify for the domestic content bonus credit amount under § 48. Applicable Project A is an energy project for purposes of § 48 that is comprised of five categories of Applicable Project Components identified in the table in section 5.05 in this notice for a ground-mounted PV (tracker): PV modules, inverters, PV trackers, steel piles, and steel reinforcing products in foundation. For purposes of the Adjusted Percentage Rule, the adjusted percentage is 40 percent for energy projects that are not offshore wind facilities. See § 48(a)(12)(B).

(b) In accordance with the table in section 5.05 of this notice, taxpayer identifies the steel piles and steel reinforcing products in foundation as steel or iron products and the PV modules, inverters, and PV trackers as Manufactured Products.

(c) All of the steel piles and steel reinforcing products in foundation are manufactured in the United States and meet the Steel or Iron Requirement.

(d) Two sets of PV modules are used in the Applicable Project A. One set has a capacity of 60 MWdc and are PV modules manufactured in the United States that incorporate c-Si PV cells and wafers that are manufactured in the United States, with the modules' remaining Manufactured Product Components, as identified in accordance

with the table in section 5.05 of this notice, also manufactured in the United States. The remaining set has a capacity of 40 MWdc and are PV modules that are not manufactured in the United States and that have no U.S. Components. None of Applicable Project A's PV inverters are manufactured in the United States or have any U.S. Components.

(e) The PV trackers used in Applicable Project A are manufactured in the United States and have seven categories of Manufactured Product Components (torque tubes, structural fasteners, drive system, dampers, actuator, controllers, and rails) of which a portion of the torque tubes are manufactured in the United States. The PV trackers are associated and directly integrated with all the PV modules used in Applicable Project A. The torque tubes manufactured in the United States are the only torque tubes associated and directly integrated with 80 MWdc of Applicable Project A's PV modules. The remainder of torque tubes and other PV tracker components are not manufactured in the United States. The PV trackers are Non-U.S. Manufactured Products because some of their Manufactured Product Components are not produced in the United States.

(f) Applicable Project A's steel or iron products identified in the table in section 5.05 of this notice meet the Steel or Iron Requirement. The Taxpayer makes a valid election to use the associated cost percentages for ground-mount (tracking) with domestic c-Si PV cells & domestic wafers. The Taxpayer is able to do so because a portion of the PV modules in the Applicable Project use domestically manufactured crystalline silicon cells that exclusively use domestically manufactured wafers. The table in section 5.05 of this notice identifies the torque tube Manufactured Product Component of a PV tracker of a PV system as constituting 8.6% of the total cost of

Manufactured Products for this type of Applicable Project. The table in section 5.05 of this notice identifies the Manufactured Product Components of a PV module as constituting 69.7% (51.6% + 4.7% + 4.7% + 3.0% + 3.0% + 0.8% + 0.2% + 0.2% + 1.2% + 0.3%) of the total cost of Manufactured Products for an Applicable Project that is a ground-mounted PV (tracker) with domestic c-Si PV cells & domestic wafers. In addition to these costs, the table in section 5.05 of this notice provides that the cost to produce PV modules for such an Applicable Project constitutes 3.7% of the total cost of Manufactured Products for such an Applicable Project. Based on a nameplate capacity weighted average of Applicable Project Component categories and Manufactured Product Component categories identified in the table in section 5.05 of this notice, the total Updated Assigned Cost Percentage attributable to the PV modules of Applicable Project A would be calculated as: (69.7% + 3.7%) x 60 / 100 = 44.0%. Based on a nameplate capacity weighted average (using the capacities of the Applicable Project Components associated with the torque tubes),the Updated Assigned Cost Percentage attributable to the torque tubes of Applicable Project A would be calculated as: 8.6% x 80 / 100 = 6.9%. Applicable Project A's overall Domestic Cost Percentage is: 44.0% + 6.9% = 50.9%. Applicable Project A satisfies the Adjusted Percentage Rule because its Domestic Cost Percentage of 50.9% exceeds the adjusted percentage that applies to Applicable Project A (40%).

(2) Example 2.

(a) Assume the same facts as in Example 1, except that the second set of PV modules used in Applicable Project A, with a capacity of 40 MWdc, are manufactured in the United States with domestically produced PV cells using foreign wafers though none

of those modules' other components are produced in the United States. The taxpayer makes a valid election to use the associated cost percentages for ground-mount (tracking) with domestic c-Si PV cells & domestic wafers. The Taxpayer is able to do so because a portion of the PV modules in Applicable Project A use domestically manufactured c-Si cells that exclusively use domestically manufactured wafers. Consistent with section 8.03(5) of this notice, the 40 MW of PV modules using foreign wafers must be treated as having foreign cells and the PV modules also are Non-U.S. Manufactured Products. In this case, the Domestic Cost Percentage would be the same as in Example 1, or 50.9%, even though the second set of PV modules are manufactured in the United States and contain domestically produced PV cells. When a taxpayer elects to use the associated cost percentages for PV systems with domestic c-Si cells and domestic wafers it must treat any domestically-produced PV cells that do not exclusively use domestic wafers as not being U.S. Components, and hence must treat the modules in which those cells are used as Non-U.S. Manufactured Products for purposes of using such cost percentages.

(3) Example 3.

(a) Assume the same facts as in Example 2, except that the taxpayer does not elect to use the associated cost percentages for ground-mount (tracking) with domestic c-Si PV cells & domestic wafers.

(b) Applicable Project A's steel or iron products identified in the table in section 5.05 of this notice meet the Steel or Iron Requirement. The table in section 5.05 of this notice identifies the torque tube Manufactured Product Component of a PV tracker of a

PV system that does not contain domestic c-Si cells and wafers as constituting 11.0% of the total cost of Manufactured Products for this type of Applicable Project.

The table in section 5.05 of this notice identifies the Manufactured Product Components of a PV module as constituting 61.1% (38.0% + 6.0% + 6.0% + 3.8% + 3.8% + 1.0% + 0.3% + 0.3% + 1.5% + 0.4%) of the total cost of Manufactured Products for an Applicable Project that is a ground-mounted PV (tracker). In addition to these costs, the table in section 5.05 of this notice provides that the cost to produce PV modules for such an Applicable Project constitutes 4.7% of the total cost of Manufactured Products for such an Applicable Project. Based on a nameplate capacity weighted average of Applicable Project Component categories and Manufactured Product Component categories identified in the table in section 5.05 of this notice, the total Updated Assigned Cost Percentage attributable to the first set of PV modules of Applicable Project A would be calculated as: (61.1% + 4.7%) x 60 / 100 = 39.5%. Based on a nameplate capacity weighted average of Applicable Project Component categories and Manufactured Product Component categories identified in the table in section 5.05 of this notice, the total Updated Assigned Cost Percentage attributable to the second set of PV modules of Applicable Project A would be calculated as: (38.0%) x 40 / 100 = 15.2%. Based on a nameplate capacity weighted average (using the capacities of the Applicable Project Components associated with the torque tubes), the Updated Assigned Cost Percentage attributable to the torque tubes of Applicable Project A would be calculated as: 11.0% x 80 / 100 = 8.8%. Applicable Project A's overall Domestic Cost Percentage is: 39.5% + 15.2% + 8.8% = 63.5%. Applicable

Project A satisfies the Adjusted Percentage Rule because its Domestic Cost Percentage of 63.5% exceeds the adjusted percentage that applies to Applicable Project A (40%).

(4) Example 4.

(a) In its taxable year beginning June 2025, Taxpayer purchases a 100-megawatt direct current (MWdc) ground-mounted PV (tracker) (Applicable Project B) from Contractor under an EPC contract, places the project in service, and makes a valid election to use the First Updated Elective Safe Harbor to qualify for the domestic content bonus credit amount under § 48. Applicable Project B is an energy project for purposes of § 48 that is comprised of five categories of Applicable Project Components identified in the table in section 5.05 in this notice for a ground-mounted PV (tracker): PV modules, inverters, PV trackers, steel piles, and steel reinforcing products in foundation. For purposes of the Adjusted Percentage Rule, the adjusted percentage is 40 percent for energy projects that are not offshore wind facilities. See § 48(a)(12)(B).

(b) In accordance with the table in section 5.05 of this notice, taxpayer identifies the steel piles and steel reinforcing products in foundation as steel or iron products and the PV modules, inverters, and PV trackers as Manufactured Products.

(c) All of the steel piles and steel reinforcing products in foundation are manufactured in the United States and meet the Steel or Iron Requirement.

(d) Two sets of PV modules are used in the Applicable Project B. One set has a capacity of 60 MWdc and are PV modules manufactured in the United States that incorporate c-Si PV cells and wafers that are manufactured in the United States, with the modules' remaining Manufactured Product Components, as identified in accordance with the table in section 5.05 of this notice, also manufactured in the United States. The

remaining set, with a capacity of 40 MWdc, is manufactured in the United States with domestically produced PV cells using foreign wafers and domestically produced front glass. None of the remaining set of modules' other Manufactured Product Components are produced in the United States. None of Applicable Project B's PV inverters are manufactured in the United States or have any U.S. Components.

(e) The PV trackers used in Applicable Project B are manufactured in the United States and have seven categories of Manufactured Product Components (torque tubes, structural fasteners, drive system, dampers, actuator, controllers, and rails) of which a portion of the torque tubes are manufactured in the United States. The PV trackers are associated and directly integrated with all the PV modules used in Applicable Project B. The torque tubes manufactured in the United States are the only torque tubes associated and directly integrated with 80 MWdc of Applicable Project B's PV modules. The remainder of torque tubes and other PV tracker components are not manufactured in the United States. The PV trackers are Non-U.S. Manufactured Products because some of their Manufactured Product Components are not produced in the United States.

(f) Applicable Project B's steel or iron products identified in the table in section 5.05 of this notice meet the Steel or Iron Requirement. The Taxpayer makes a valid election to use the associated cost percentages for ground-mount (tracking) with domestic c-Si PV cells & domestic wafers. The Taxpayer is able to do so because a portion of the PV modules in the Applicable Project use domestically manufactured crystalline silicon cells that exclusively use domestically manufactured wafers. The table in section 5.05 of this notice identifies the torque tube Manufactured Product Component of a PV tracker of a PV system as constituting 8.6% of the total cost of

Manufactured Products for this type of Applicable Project. The table in section 5.05 of this notice identifies the Manufactured Product Components of a PV module as constituting 69.7% (51.6% + 4.7% + 4.7% + 3.0% + 3.0% + 0.8% + 0.2% + 0.2% + 1.2% +0.3%) of the total cost of Manufactured Products for an Applicable Project that is a ground-mounted PV (tracker) with domestic c-Si PV cells & domestic wafers, of which front glass accounts for 4.7 percentage points. In addition to these costs, the table in section 5.05 of this notice provides that the cost to produce PV modules for such an Applicable Project constitutes 3.7% of the total cost of Manufactured Products for such an Applicable Project.

Based on a nameplate capacity weighted average of Applicable Project Component categories and Manufactured Product Component categories identified in the table in section 5.05 of this notice, the total Updated Assigned Cost Percentage attributable to the PV modules of Applicable Project B would be calculated as: [(69.7% + 3.7%) x 60 / 100] + [(4.7%) x 40 / 100] = 45.9%. Based on a nameplate capacity weighted average (using the capacities of the Applicable Project Components associated with torque tubes), the Updated Assigned Cost Percentage attributable to the torque tubes of Applicable Project B would be calculated as: 8.6% x 80 / 100 = 6.9%. Applicable Project B's overall Domestic Cost Percentage is: 45.9% + 6.9% = 52.8%. Applicable Project B satisfies the Adjusted Percentage Rule because its Domestic Cost Percentage of 52.8% exceeds the adjusted percentage that applies to Applicable Project B (40%).

SECTION 9. CERTIFICATION

An Applicable Project is eligible for a domestic content bonus credit amount if the Applicable Project satisfies the Domestic Content Requirement and the taxpayer timely submits to the IRS the certification described in section 5 of Notice 2023-38. To affirmatively elect to rely on the New Elective Safe Harbor, a taxpayer must provide on the Domestic Content Certification Statement described in section 5.01(2)(c) of Notice 2023-38 a statement that the taxpayer is relying on the First Updated Elective Safe Harbor. As provided in section 5.01(2)(b) of Notice 2023-38, the Domestic Content Certification Statement must be attached to Form 8835, *Renewable Electricity Production Credit*; Form 3468, *Investment Credit*; or other applicable form for reporting domestic content bonus credit amounts under §§ 45, 45Y, 48, or 48E filed with the taxpayer's annual return submitted to the IRS for the first taxable year in which the taxpayer reports a domestic content bonus credit amount for such Applicable Project.

SECTION 10. SUBSTANTIATION

A taxpayer reporting a domestic content bonus credit amount for meeting the Domestic Content Requirement must meet the general recordkeeping requirements under § 6001 to substantiate that the Domestic Content Requirement has been met. Section 6001 provides that every person liable for any tax imposed by the Code, or for the collection thereof, must keep such records as the Secretary of the Treasury or her delegate may from time to time prescribe. Section 1.6001-1(a) provides that any person subject to income tax must keep such permanent books of account or records as are sufficient to establish the amount of gross income, deductions, credits, or other matters required to be shown by such person in any return of such tax. Section 1.6001-1(e) provides that the books and records required by § 1.6001-1 must be retained so long as the contents thereof may become material in the administration of any internal revenue

law. See also §§ 45(b)(12), 48(a)(16), 48E(a)(3)(B) (by cross-reference to § 48(a)(12)), and 45Y(f).

SECTION 11. TAXPAYER RELIANCE

To the extent reliance statements in Notice 2023-38 and Notice 2024-41 conflict with this notice, the reliance statements described below shall control.

Taxpayers may rely on the rules described in sections 3 through 6 of Notice 2023-38 for the domestic content bonus credit requirements for any Applicable Project, the construction of which begins before the date that is 90 days after the date of publication in the *Federal Register* of proposed regulations on the domestic content bonus credit requirements.

Taxpayers may rely on the two modifications[14] of Table 2 in Notice 2024-41 for any Applicable Project the construction of which begins before the date that is 90 days after the date of publication in the *Federal Register* of proposed regulations on the domestic content bonus credit requirements.

Taxpayers may rely on Notice 2024-41, in its entirety and as modified by section 4 of this notice, for the domestic content bonus credit requirements for any Applicable Project, the construction of which begins before the date that is 90 days after the effective date of this notice.

Effective January 16, 2025, taxpayers may rely on the First Updated Elective Safe Harbor and the guidance provided in this notice for the domestic content bonus credit requirements for any Applicable Project the construction of which begins before

[14] The two modifications of Table 2 in Notice 2024-41 are (1) adding the Applicable Project "Hydropower Facility, or Pumped Hydropower Storage Facility" and its associated list of Applicable Project Components and categorizations and (2) replacing "Utility-scale photovoltaic system" with "Ground-mount and rooftop photovoltaic system."

the date that is 90 days after any future modification, update, or withdrawal of the First Updated Elective Safe Harbor.

Where taxpayers may rely on either the New Elective Safe Harbor of Notice 2024-41 or the First Updated Elective Safe Harbor in this notice, a taxpayer may apply only one of the above-referenced safe harbors, and its associated cost percentages, and use it exclusively.

Taxpayers may treat the classifications of any Applicable Project Components or Manufactured Product Components that are listed within the tables provided in sections 5-7 of this notice as also being listed in Table 2 of Notice 2023-38. To the extent Table 2 of Notice 2023-38 and the tables provided in sections 5-7 of this notice are inconsistent regarding the classification of Applicable Project Components or Manufactured Product Components, the taxpayer may elect which set of classifications to use and must consistently apply the related classifications to all the other Applicable Project Components or Manufactured Product Components of the Applicable Project.

SECTION 12. PAPERWORK REDUCTION ACT

Any collection burden associated with this notice is accounted for in Office of Management and Budget (OMB) control numbers 1545-0123 and 1545-0047. The reporting requirements from section 9 of this notice and the recordkeeping requirements from section 10 of this notice are associated with the IRA-related changes to Form 3468 and Form 8835 that were approved, and will continue to be approved, under OMB control numbers 1545-0123 and 1545-0047. This notice does not alter any previously approved information collection requirements and does not create new collection requirements not already approved by OMB.

SECTION 13. EFFECT ON OTHER DOCUMENTS

Notice 2023-38 and Notice 2024-41 are both modified as provided in this notice.

SECTION 14. DRAFTING INFORMATION

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