

*Office of Associate Chief Counsel (Passthroughs & Special Industries)  
U.S. Internal Revenue Service*

*U.S. Department of Treasury  
Washington, DC 20220*

**Re: Notice 2022-51 – Comments on Domestic Content Requirements Under the Act Commonly Known as the Inflation Reduction Act of 2022 (the “IRA”)**

To Whom It May Concern:

Madison Energy Investments LP (“**MEI**”) greatly appreciates the opportunity to provide comment in respect of IRS Notice 2022-51. The IRA is a historic piece of legislation with the potential to dramatically increase renewable and clean energy generation and change our climate future.

However, there is a concern that the IRA, and specifically references to the Buy America Requirements of 49 CFR Part 661 (“**Buy America Requirements**”), have the potential to disincentivize solar PV carport installations (“**Carports**”) in the United States. Given that Carports have tremendous potential, especially in urban areas, to materially impact the United States renewable energy landscape in the immediate future, MEI, a developer and owner of distributed generation assets throughout the U.S., respectfully requests clarifying guidance from the Treasury and IRS in the hopes of avoiding such an outcome.

Carports are solar arrays constructed over pre-existing parking (surface and structures) and other impervious land. From an electricity generation standpoint, they produce the same as any ground mounted system, but need to be erected in a steel racking structure to elevate and have continued use of the underlying area. Whereas ground mount projects are typically constructed over existing land which can be otherwise used for agriculture and require additional grid interconnection / permitting costs and delays, Carports are typically in urban and suburban areas complementary to the existing land use and integrate faster, more affordably and provide better local resiliency in the existing grid infrastructure.

One area of particular concern for MEI and for a large segment of the commercial and industrial solar industry pursuing Carports is whether racking (“**Racking**”) is appropriately treated as (i) “Steel” or (ii) “Manufactured Product”.

Racking goes through a “manufacturing process” akin to a Manufactured Product. Specifically, Racking undergoes more than sufficient processes to “alter the form [and] function of [its] materials [and] elements [. . .] in a manner adding value and transforming those materials [and] elements so that they represent a new end product functionally different from that which would result from mere assembly of the elements or materials” (*see* definition of “Manufacturing

Process” in Section 661.3 of the Buy America Requirements). Racking is an integral component to the overall solar PV electric generation asset. The Racking is designed, engineered, and then manufactured for the specific characteristics of a project including, but not limited to, geography, wind speeds, geotechnical, seismic, temperature, coastal applications, building code categories, etc. Racking is a “manufactured product” for solar application as much as (and arguably more so) than modules, inverters, and electrical equipment that can more easily be moved or substituted from one project location to another. Racking cannot be easily substituted between projects given that it is engineered, designed, and manufactured specifically for the relevant project (further identified in Exhibit A and Exhibit B).

What has limited Carports to date is the additional cost of Racking. Below is an illustrative cost breakdown of the cost to complete a Carport system:

<b>Illustrative 1.5 MW System</b>	<b>Cost (\$)</b>	<b>(% of Total Cost)</b>
Modules	\$ 720,000.00	16.3%
Inverters	\$ 150,000.00	3.4%
Other Equipment	\$ 290,000.00	6.6%
Labor (Construction Solar Array Only)	\$ 525,000.00	11.9%
Administrative/Soft Costs	\$ 95,000.00	2.2%
Racking (US Steel)	\$ 1,350,000.00	30.6%
Labor (Construction Racking Only)	\$ 1,275,000.00	28.9%
	\$ 4,405,000.00	100.0%

As illustrated, Racking equipment used in a Carport system performs more than just the function of a structure (i.e., it does not fall within the definition of Steel found in the Buy America Requirements). Instead, it provides the important function of a solar system in the electrical design for wire management and grounding requirements (represented in Exhibit B – Inverter/Wiring Integration with Racking). The specific project location and design parameters drive the manufacturing and specifications of the Racking to comply with code and the specific site installation and complete solar generating system.

Furthermore, we do not believe the definition of “Manufactured end products” in clause (3) of Appendix A to Section 661.3 of the Buy America Requirements (i.e., “infrastructure projects *not made primarily of steel*”) is controlling nor requires exclusion of steel Racking from qualification as a “Manufactured Product”. Importantly, sections 45 and 48 do not use the definition of “manufactured end product” nor cross reference this provision in Buy America. As such, we respectfully request guidance from Treasury clarifying that a product may be treated as a Manufactured Product even if primarily made of steel.

Lastly, given the unique cost break-down for Carport system (i.e., the outsized cost of the Racking (as demonstrated above)), if Racking is classified as “Steel”, it would not qualify for the 10% domestic content adder despite a significant cost apportioned to American-made manufactured product and labor. The immediate effect would be to incentivize other forms of solar PV projects over Carports despite their potential contribution to a cleaner energy future. We do not believe this was Congress’ intent.

**Conclusion:**

If the intent of the Inflation Reduction Act and the domestic content adder is to promote American renewable energy manufacturing and utilize American labor to build out renewable energy infrastructure, this simple clarification of the domestic content adder for “Manufactured Product” would greatly benefit the cause.

According to the U.S. Geological Survey (USGS), 5.5% of all developed land in the lower 48 states is covered by impervious parking lots<sup>1</sup>, enough to supply 230 GW of solar power. This is pre-existing used land with little to no interconnection or infrastructure needs. It can be installed quickly, in existing load centers and naturally complement an investment in EV charging installations.

Given the unique nature of Racking used in Carport systems, MEI respectfully requests the Treasury provide guidance clarifying that Racking should be considered a “Manufactured Product”. Such clarification would avoid any undue disadvantage for Carports vis-à-vis other forms of solar PV projects and would be consistent with Congressional intent to encourage domestic sourcing for equipment and products installed in renewable and clean energy facilities.

Respectfully submitted,



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Blair Marsteller  
General Counsel

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<sup>1</sup> <https://www.sciencebase.gov/catalog/item/5c0ea593e4b0c53ecb2af59f>

**EXHIBIT A**  
Illustrative Examples of Racking as a Manufactured Product

Solar Module

Racking Structure



Solar Module

Racking Structure





### EXHIBIT B (CONTINUED)

Madison Energy Investments built, owns and operates an existing Carport solar system for Bowie State University, Maryland's oldest Historically Black College/University. Placed into service in 2020, the project was supported by a Maryland Energy Administration (MEA) grant to offset cost of an otherwise uneconomic Carport. The Racking structure was specifically engineered and designed to meet University requirements and integrate with Inverter/Wiring system. As is typical with Carport projects, additional electric vehicle charging infrastructure was included.

