

August 10, 2014

Department of the Treasury  
Internal Revenue Service  
P.O. Box 7604  
Ben Franklin Station  
Washington, DC 20044

RE: Comments on Proposed Rules for REIT Real Property Definitions (IRS REG-150760-13)

To Whom It May Concern:

We appreciate the opportunity to submit comments to the Department of Treasury's proposed rules to amend 26 CFR Part 1. We would also like to request the opportunity to present and elaborate on the arguments below during the public hearing scheduled for September 18, 2014. The views discussed below are entirely ours and do not necessarily reflect the views of Stanford University, the University of Miami or any other entity with which we are affiliated.

By way of background, one of us (Reicher) directs a center on energy policy and finance at Stanford and previously was Assistant Secretary of Energy for Energy Efficiency and Renewable Energy, a wind company executive, an energy investor, and director of climate change and energy initiatives at Google.

The other (Mormann) is professor of energy law at the University of Miami and faculty fellow at Stanford. Previously, he worked as an energy attorney on renewable energy project development and as a management consultant advising high-tech clients for McKinsey & Company.

We welcome the Department of Treasury's initiative to clarify the Internal Revenue Code's definition of real property for the purposes of Real Estate Investment Trusts (REITs), especially regarding renewable energy property. We are concerned, however, that the proposed rules are inconsistent with previous IRS rulings, fail to reflect the realities of renewable energy property and, as a result, do too little to promote the cost-effective deployment of clean, renewable energy generation assets, a top national need and key objective of the Obama Administration. While our primary interest in the proposed rules relates to the REIT eligibility of solar and other renewable energy property, the implications of our comments extend well beyond these types of assets.

We strongly urge the IRS and the Department of Treasury to revert to the well-established physical definition of passive, REIT-eligible real property. Adherence to the proven passive definition of REIT-eligible real property ensures consistency with long-standing IRS precedent, avoids issues of arbitrariness, and fosters legal certainty. If the IRS and the Department of Treasury insist on abandoning its previous, well-established physical definition in favor of an inconsistent, arbitrary functional definition of passive real property, that definition should be amended to be more consistent with previous rulings by revising § 1.856-10(d)(2)(iii)(A) of the proposed regulations to read as follows:

“Other inherently permanent structures serve a passive function, such as to contain, support, shelter, cover, protect, convert, or transport, and do not serve an active function, such as to manufacture, create, or produce.”

In the interest of legal certainty, policy parity, and more effective promotion of renewable energy assets, we suggest revising the draft rules based on the following observations and comments:

1. The proposed rules’ functional definition of a property’s “passive” character departs from the physical definition used in previous IRS rulings, creates legal uncertainty, introduces an element of arbitrariness, and causes significant reclassification of previously REIT-eligible real property to personal property that no longer qualifies for REIT financing.
2. The proposed criteria to guide the asset test for REIT eligibility and the IRS’s underlying assumptions for their application to building-integrated solar energy property do not reflect the realities of solar energy assets.
3. In light of their technological similarities, all types of solar photovoltaic property should receive the same recognition as REIT-eligible “types of other inherently permanent structures” that LED billboards, electrical transmission lines and towers, among others, already enjoy.
4. Wind, geothermal, hydropower, and other renewable energy property should be considered, at least in part, as REIT-eligible real property.
5. REIT eligibility for solar, wind, geothermal, and other renewable energy property is smart and sustainable policy that honors the legislative intent behind the 1960 REIT Act, fosters policy parity, and advances key U.S. economic, security, and environmental objectives.

We address each of these points in greater detail below.

#### **1. The proposed functional definition of passive property conflicts with previous IRS rulings**

Unlike the IRS and Treasury Department (*See* p. 27510), we do not view the proposed regulations as a mere clarification of the existing definition of real property but, rather, as a substantial modification thereof that will require significant reclassification of property. In particular, the newly introduced requirement that inherently permanent structures must serve “a passive function” represents a departure from previous IRS rulings and their physical definition of a property’s passive character. According to §1.856-10(d)(2)(iii)(A) of the proposed regulations, other inherently permanent structures (besides buildings and other structures listed in §1.856-10(d)(2)(i)-(ii) of the proposed regulations) must serve a “passive function, such as to contain, support, shelter, cover, or protect,” and must not “serve an active function such as to manufacture, create, produce, convert, or transport.” This passive-function requirement is inconsistent with several key IRS rulings, including but not limited to the following three examples:

- In LTR 200725015, the IRS ruled a system of electricity transmission and distribution assets as REIT-eligible real property even though these assets included transformers and other devices that convert electricity, e.g., from high-voltage transmission levels (up to 765kV) to low-voltage distribution levels (down to 2kV). Comparing the transmission and distribution assets to the railroad tracks and other components subject to Rev. Rul. 69-94, the IRS established the real property character of the transmission and distribution assets based on a *physical* definition, describing them as “a passive conduit that allows [electricity] created by a generation source to flow through the system to end-users.” Under the proposed rule’s *functional* definition, these assets would meet the “conversion” example of an active function and, hence, no longer qualify as inherently permanent structures. The transformers, substations, and other conversion devices would not qualify as structural components of inherently permanent structures either, given that they do not meet the criteria listed in § 1.856-10(e)(2)(i)-(iv) of the proposed regulations. The lack of a passive function is even more obvious for the transmission lines themselves given their function to “transport” electricity, another expressly mentioned example of an active function. According to the proposed regulations’ functional definition of passive property, therefore, the system of electricity transmission and distribution assets subject to LTR 200725015 would require reclassification as personal, rather than REIT-eligible real property. § 1.856-10(d)(2)(iii)(B) of the proposed regulations provides only partial relief given that the list of designated inherently permanent structures includes transmission towers and lines but not transformers, substations, and other conversion devices. In practice, the resulting bifurcation of physically coherent transmission systems for purposes of cost-effective REIT-financing could further delay the much needed renovation and expansion of America’s aging electricity transmission infrastructure.
- In LTR 200937006, the IRS ruled a natural gas distribution system as REIT-eligible real property. The system included pipelines, compressors, and equipment to convert natural gas from gaseous to liquid state and vice versa. Similar to the electricity transmission ruling, the IRS established the REIT-eligible real property character of the natural gas distribution system by reference to its role as a “passive conduit that does not include any machinery or equipment capable of producing ... any commodity.” Under the proposed rules’ functional definition of passive property, however, the natural gas distribution system would both “convert” and “transport” natural gas and, therefore, be deemed to serve an active function, requiring its reclassification as personal, rather than REIT-eligible real property. As before, § 1.856-10(d)(2)(iii)(B) of the proposed regulations provides only partial relief as discussed in greater detail below in the context of the proposed regulations’ Example 10.
- In LTR 201204006, the IRS ruled that a large LED sign located on top of a building constituted both an inherently permanent structure and a structural component to the building. LEDs convert electric energy into light and, hence, serve an active function according to the proposed rules. Without the list of designated inherently permanent structures pursuant to § 1.856-10(d)(2)(iii)(B) of the proposed regulations, therefore, previously REIT-eligible LED signs would now require reclassification to personal property.

Remarkably, the IRS purports to merely clarify rather than modify the existing definitions of real property even though Example 10 openly acknowledges the need for more nuanced treatment of the aforementioned transmission and pipeline systems. Applying its proposed rules to an oil pipeline transmission system, the IRS concludes that the system's pipelines, storage tanks, vents, and valves all constitute REIT-eligible real property but finds the system's meters and compressors to be personal property (*See* p. 27515). The most puzzling aspect of Example 10, however, is the nonchalance with which the IRS ignores its own rules by first acknowledging that "the pipeline transmission system serves an active function, transporting oil" only to then conclude that "a distinct asset within the system may nevertheless be an inherently permanent structure that does not itself perform an active function." What the IRS fails to clarify, however, is that the only way for such distinct assets to qualify as REIT-eligible inherently permanent structures – in spite of their active function – is through grandfathering pursuant to § 1.856-10(d)(2)(iii)(B) of the proposed regulations.

*The list of inherently permanent structures according to § 1.856-10(d)(2)(iii)(B) of the proposed regulations epitomizes the inconsistency of the proposed rules' functional definition of passive property with decades of IRS rulemaking practice. By grandfathering the listed assets – despite the active functions they serve – the proposed rules seek to resolve the very problem they themselves create by abandoning the well-established physical definition of passive property in favor of a functional definition. The outcome not only defeats the rulemaking project's commendable purpose of creating greater legal certainty but introduces an element of arbitrariness given that only some, but not all previously REIT-eligible real property assets are included in the list of inherently permanent structures pursuant to § 1.856-10(d)(2)(iii)(B) of the proposed regulations.*

We strongly urge the IRS and the Department of Treasury to revert to the well-established physical definition of passive, REIT-eligible real property. Adherence to the proven passive definition of REIT-eligible real property ensures consistency with long-standing IRS precedent, avoids the aforementioned issues of arbitrariness, and fosters legal certainty. If the IRS and the Department of Treasury insist on abandoning its previous, well-established physical definition in favor of an inconsistent, arbitrary functional definition of passive real property, that definition should be amended to be more consistent with previous rulings by revising § 1.856-10(d)(2)(iii)(A) of the proposed regulations to read as follows:

“Other inherently permanent structures serve a passive function, such as to contain, support, shelter, cover, ~~or~~ protect, **convert, or transport**, and do not serve an active function, such as to manufacture, create, ~~or produce, convert, or transport.~~”

Critically, both our primary and our fallback recommendations would eliminate the need for grandfathering that infuses the proposed regulations with arbitrariness and defeat their stated purpose of enhancing legal certainty. In the process, our recommendations would provide greater guidance to taxpayers and much needed relief to the IRS as the agency battles with an ever-growing docket of requests for private letter and revenue rulings to clarify the REIT-eligibility of various asset classes.

## **2. The proposed criteria and assumptions do not reflect the realities of solar energy property**

Based on its proposed rules, the IRS grants REIT eligibility to smaller-scale, building-integrated commercial and residential solar photovoltaic (PV) assets but denies REIT eligibility to utility-scale solar PV assets (*See* Examples 8 & 9). This differential treatment appears to be based, in large part, on a set of assumptions that do not correspond to the realities of building-integrated solar assets (*See* Example 9(ii)-(iii)).

For instance, the IRS rules assume that solar panels for smaller-scale, building-integrated installations are “designed specifically for the particular office building for which they are a part” and are “expensive and time consuming to install and remove” (*See* Example 9(i)). In reality, most of the materials used for solar rooftop and other smaller-scale installations are mass-produced using the same standardized production cycles employed for utility-scale materials and can be removed and reinstalled without major complications or damage. Similarly, the IRS rules assume that the tenant only “occasionally transfers excess electricity produced by the Solar Energy Assets to a utility company” (*See* Example 9(i)). This assumption leads the IRS to conclude that the assets serve a “utility-like”, “passive” function producing “income from consideration for the use or occupancy of space within the office building” (*See* Example 9(ii)(D)-(F)). This assessment, however, ignores the role of many building-integrated solar assets in earning active income, e.g., through the sale of significant quantities of surplus electricity to local utilities. And even where a building uses all, or virtually all, of its solar electricity, the tenant may still earn active income through the sale of renewable energy credits (RECs) awarded under a local renewable portfolio standard (RPS). When these and other questionable assumptions and the resulting conclusions are corrected, it is anything but clear whether the IRS’s proposed test criteria would provide the necessary support for our favored conclusion that building-integrated solar assets are REIT-eligible real property.

Importantly, we do not mean to suggest that neither utility-scale nor smaller-scale, building-integrated solar assets should be granted REIT eligibility. On the contrary, we urge the IRS and the Department of Treasury to grant REIT eligibility to solar assets of all kinds. We highlight the aforementioned shortcomings of the proposed rules only to point out the inadequacy of the proposed criteria and their sample application by the IRS to properly guide the determination of solar energy assets’ real property character and REIT eligibility. Our recommendations for adherence to the well-established physical definition of REIT-eligible real property or, in the alternative, for revision of the proposed functional definition (*see supra*) would resolve these inadequacies by providing greater definitional clarity and, with it, legal certainty. And, critically, they would make building-integrated, utility-scale, and other solar assets eligible for REIT financing.

## **3. Solar PV assets should be recognized as REIT-eligible “inherently permanent structures”**

If the IRS follows our primary recommendation to revert back to its original physical rather than functional definition of real property, solar PV panels would constitute REIT-eligible real

property.<sup>1</sup> The case for solar PV assets' status as REIT-eligible real property becomes even stronger if the IRS chooses, instead, to revise its functional definition per our fallback recommendation's proposed edits to the definition of a property's passive function. Once conversion and transportation are included as examples of a property's passive function, solar PV assets turn into textbook examples of real property that serves a passive function as the comparison with LED outdoor displays aptly illustrates.

Solar PV panels are technologically analogous to the LED outdoor advertising displays that already enjoy REIT eligibility (*See* LTR 201204006) and are designated as "inherently permanent structures" under the proposed rules (*See* § 1.856-10(d)(2)(iii)(B) of the proposed regulations). Both solar panels and LED's rely on so-called P/N junctions with one (LED) designed to absorb electrons to release photons of light while the other (solar PV) absorbs photons to release electrons. LED's use these junctions to convert electricity into light while solar PV panels uses the same technology to convert light into electricity. Simply speaking, a solar PV panel is an LED operating in reverse. The striking technological analogy between both should be reflected in their analogous treatment for the purposes of REIT eligibility.

Even if the IRS were to insist on its inconsistent functional definition of passive property, many solar PV assets may deserve classification as REIT-eligible, passive real property. We would like to draw the IRS's attention to "sheltering" as a listed example of a structure's passive function (*See* § 1.856-10(d)(2)(iii)(A) of the proposed regulations). Solar PV panels are increasingly recognized for their benefits beyond converting sunlight into electricity. These benefits include temperature management through shading and shielding of otherwise exposed surfaces from solar radiation.<sup>2</sup> These properties allow solar PV assets to help protect pastures, parking lots, buildings, and other structures from the detrimental effects of solar radiation and, in the process, to meet the "sheltering" example of a structure's passive function pursuant to § 1.856-10(d)(2)(iii)(A) of the proposed regulations.

Even if the IRS decides against following our recommendations to revise its definition of passive real property, we strongly urge the IRS to, at the very least, include solar PV assets, of all kinds, in the list of REIT-eligible inherently permanent structures pursuant to § 1.856-10(d)(2)(iii)(B) of the proposed regulations.

#### **4. Wind, geothermal, and other renewable assets should also be recognized as REIT-eligible**

With its turbine blades and other mechanical, moving parts, wind energy assets may not be as "passive" as solar PV assets. Like solar energy property, however, wind energy property turns naturally occurring energy into electric power. This conversion process matches that recognized as REIT-eligible in the context of the aforementioned rulings on natural gas and electricity

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<sup>1</sup> *See also* David Feldman, et al., *Technical Qualifications for Treating Photovoltaic Assets as Real Property by Real Estate Investment Trusts (REITs)*, NAT'L RENEWABLE ENERGY LABORATORY 20 (2012): "Based on this initial examination, it would PV systems have many of the qualities associated with inherently permanent assets."

<sup>2</sup> *See, e.g.,* Jesse Thompson, *Unrealized, Indirect Benefits of Solar Installations: Solar Heat Gain*, available at <http://www.circularenergy.com/circular-energy-ebulletin/indirect-benefits-of-solar-panels/>: "Shading should also increase the lifespan of the roofing material itself, by reducing the impact of the damaging UV light, and lowering and lowering the degradation effects of extreme heat on the exposed membrane, adding years to the service life of the roofing material."

transmission systems (*see supra*). Moreover, wind turbines differ from conventional, non-renewable power plants in their vastly reduced need for human personnel to actively operate wind energy assets. Accordingly, “arguments remain persuasive that the entire facility should be treated as real property for REIT purposes.”<sup>3</sup>

Geothermal energy assets resemble solar and wind property in the way they convert naturally occurring energy – heat from the earth’s core – into electric power. To be sure, the turbines used raise similar questions as to their mechanical movement as wind turbine blades and may, in fact, more closely resemble natural gas turbines. On the other hand, geothermal facilities require considerably less, if any, human intervention to operate than natural gas and other conventional power plants. Assuming geothermal assets are not considered mineral assets, they should be considered REIT-eligible real property, at least up to the turbine.<sup>4</sup>

A similar, bifurcated approach may be appropriate for hydro-electric facilities, considering dams and associated assets as REIT-eligible real property while holding the turbine itself to be personal property for the purposes of REIT eligibility.

Under both our primary and fallback recommendations, therefore, renewable energy property beyond solar should, at least in part, be recognized as REIT-eligible real property.

##### **5. Granting REIT eligibility to renewable energy is smart and sustainable policy**

When President Eisenhower signed the 1960 REIT Act into law, he did so for the express purpose of enabling not only large institutional but also smaller individual investors to invest in large diversified portfolios of income-producing properties.<sup>5</sup> Today, publicly traded REITs have raised nearly \$700 billion from institutional as well as retail and other small-scale investors who trade stocks for their personal accounts.<sup>6</sup> We urge the Department of Treasury to open REITs for investment in portfolios of solar, wind, geothermal, and other income-producing, renewable energy properties.<sup>7</sup>

Granting renewables the same access to REIT financing that natural gas, oil, and other fossil energy property already enjoy – consistent with IRS precedent – would mark a significant step toward leveling the playing field between renewable and conventional energy assets. In addition, cost-effective REIT financing would provide four distinct benefits to the nascent renewable energy industry.<sup>8</sup> First, publicly traded REITs would allow renewables to graduate from expensive private equity markets to more cost-effective public capital markets dramatically reducing their cost of capital. Second, the REIT structure’s broad investor appeal would empower millions of Americans to benefit from renewable energy investment thereby promoting

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<sup>3</sup> See Patrick Dowdall, *Using REITs for Renewable Energy Projects*, 137 TAX NOTES 1409, 1418 (2012).

<sup>4</sup> *Id.* at 1419,

<sup>5</sup> See STEFANO SIMONTACCHI & UWE STOSCHEK, *GUIDE TO GLOBAL REAL ESTATE INVESTMENT TRUSTS* 8 (2012).

<sup>6</sup> See *REITWatch June 2013*, NAT’L ASS’N REAL ESTATE INVESTMENT TR. (2013).

<sup>7</sup> See also Felix Mormann & Dan Reicher, *How to Make Renewable Energy Competitive*, N.Y. TIMES, June 1, 2012, available at <http://nyti.ms/LmGDI7>.

<sup>8</sup> For a detailed discussion of these and other benefits to be derived from renewable energy REITs, see Felix Mormann, *Beyond Tax Credits: Smarter Tax Policy for a Cleaner, More Democratic Energy Future*, 31 Yale J. on Reg. 303 (2014), available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2367780](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2367780).

popular support for the transition toward a cleaner, more sustainable energy economy. Third, with publicly traded shares, REITs could significantly improve the liquidity of renewable energy investment, create much needed secondary markets, and harness capital market reporting requirements to foster greater transparency and competition between renewable energy property developers. Fourth and finally, access to the REIT structure would give the nascent renewable energy industry “access to an entire industry of lawyers, financiers, and investors with the understanding and experience, to deploy billions of dollars in capital efficiently and effectively through REITs.”<sup>9</sup>

It is worth pointing out that opening REITs up to investment in renewable energy assets will not significantly erode the corporate tax base. The vast majority of renewable energy projects today use some version of the classic partnership structure to finance themselves. Given the partnership’s taxation as a pass-through entity, these project companies do not pay income tax at the entity level. Giving these projects access to the REIT structure, therefore, would not change their tax status but allow them to tax-efficiently raise low-cost capital on public markets. With or without access to cost-effective REIT financing, the income of most renewable energy projects does not factor into the corporate tax base. Since the counterfactual to renewable energy REITs is, in most instances, not the renewable energy corporation but rather the renewable energy partnership, fears that opening REITs to renewables would erode the corporate tax base are unfounded. It is impossible to erode what was never there.<sup>10</sup>

We thank you for the opportunity to comment and look forward to elaborating on the aforementioned points during the public hearing on September 18, 2014.

Sincerely,

Felix Mormann

Dan W. Reicher

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<sup>9</sup> David Feldman & Edward Settle, *Master Limited Partnerships and Real Estate Investment Trusts*, NAT’L RENEWABLE ENERGY LABORATORY 20 (2013).

<sup>10</sup> See Mormann *supra* note 7.